

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND.

---

DEPARTMENTAL COMMITTEE

ON THE

IRISH PIG-BREEDING  
INDUSTRY.

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MINUTES OF EVIDENCE, APPENDICES AND INDEX.

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*Presented to both Houses of Parliament by Command of His Majesty.*

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To His Excellency, IVOR CHURCHILL, BARON WIMBORNE, &c., &c.,  
LORD LIEUTENANT-GENERAL AND GENERAL GOVERNOR OF IRELAND.

MAY IT PLEASE YOUR EXCELLENCY,

I am directed by the Vice-President to submit to Your Excellency the Minutes of Evidence taken by the Departmental Committee on the Irish Pig Breeding Industry, with the Appendices thereto.

I have the honour to remain,

Your Excellency's faithful Servant,

T. P. GILL,

*Secretary.*

Department of Agriculture and  
Technical Instruction for Ireland,  
Upper Merrion Street,  
DUBLIN.

# DEPARTMENTAL COMMITTEE ON THE IRISH PIG-BREEDING INDUSTRY.

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DEPARTMENTAL COMMITTEE ON THE IRISH PRO-BREEDING INDUSTRY.

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Mr. JAMES H. GARDNER, D.Sc., Deputy Assistant Secretary in respect of Agreements and Allied Agreements  
Inspector of the Department of Agriculture and Technical Instruction for Ireland (Chairman).  
Mr. ROBERT M. BOYLE, Generalist, Chemist, Co. Antrim.  
Mr. PATRICK CLARK, Department of Agriculture and Technical Instruction for Ireland.  
Mr. STEPHEN O'BRIEN, Board of Trade, Limerick.  
Mr. O. W. H. RICHARDS, B.A., Department of Agriculture and Technical Instruction for Ireland.  
Mr. T. WHITTINGTON, J.P., St. James's Hill, King's County.

THEIRS OF REPLYING,

.. The impact into the present state of the "2-speeding industry" is contrasted to the present state of the "2-speeding industry" in Ireland, with special reference to the current situation in Ireland; and to various

# Departmental Committee on the Irish Pig Breeding Industry.

## MINUTES OF EVIDENCE.

### FIRST PUBLIC SITTING.

MONDAY, 16TH NOVEMBER, 1914.

AT 10 O'CLOCK, A.M.

At the Courthouse, Cork.

#### PRESENT:

Mr. JAMES S. GORDON, B.Sc. (Chairman).  
Mr. R. N. BORN.  
Mr. STEPHEN O'MALL.

Mr. PATRICK CLUNE.  
Mr. J. WILKINSON, J.P.  
Mr. G. W. H. ROULSTON, B.A.

Mr. CHARLES MAINES, Sunnyvale, Malver

Mr. C. DUGGAN—continued.

Stated that for the past two years he had fattened as many as 300 pigs. The price for pork in 1912 and 1913 was satisfactory, and he made a profit. In 1914 the price of pork dropped, and he had partially given up feeding. The fluctuations in the price of pork discouraged people from keeping pigs; he himself had received prices ranging from 40/- to 70/-. At the present price of feeding stuffs the current rate of 55/- per cwt. (dead weight) would not give any profit. As regards marketing, he considered the present system unsatisfactory. The general belief was that a combination existed among buyers to arrange prices, and this was strengthened by the fact that the latter settled the hour at which they will begin to buy in the market. With cattle and other stock it was different, and competition was better. As regards feeding, he grew his own foodstuffs and gave barley, a little ground wheat, and potatoes, all previously steeped in boiling water. The price of 40/- per cwt. he quoted was for over-weight pigs to be shipped across Channel. In 1912, when prices for pork were high—he got up to 70/- in that year—he made a profit per pig of about 15/- each. In the past year he kept an account of the cost of the feeding stuffs but not of the weights of meat used. The pigs he fed he bought in at stores at from 8 to 4 months old, and they cost from 25/- up to 40/- each. Latterly he had started to breed for himself. He was not aware that experiments showed that 5 cwt. meal made one cwt. of pork. His belief was that pig rearing would not pay at 55/- per cwt. for pork. It would need 60/- per cwt. to return a profit. Men who fed on a large scale, say, 200 pigs and upwards and bought large quantities of food at a time, would make more profit. Most of the cottagers in his district had given up keeping pigs because they did not pay, and this was due to the high price of meal and the fluctuations in the price of pork. In comparison with every other class of farm produce the fluctuations in the value of pork was greatest. It was not the buying-in price of hockens (at present 25/- each in his district), which prevented labourers from keeping pigs.

Mr. C. DUGGAN, Douglas Hall, Cork.

Stated that he usually had a dozen sows and kept the progeny until finished. He also bought stores as required. He generally had fifty fattening all the

time. His system was, briefly, to rear all that he could, and if any more were required, to buy on cheaply as he could.

He considered that there should be an alternative outlet to the merchants. To secure this and also more competition, as well as to give confidence to feeders, he suggested the establishment of an export trade similar to that of Holland. Feeders had now one market only and prices fluctuated seriously. He had seen them go from 55/- to 55/- in a few days. This was not an encouragement to farmers. At the same time it would be noted that pork could not be placed on the market as bacon for some weeks, and that 50/- was a large variation. In Southfield the variation would be 2/- to 4/-. He thought Southfield prices were likely to be maintained owing to the probability of the Germans taking over the Dutch supplies. This should leave a further opening for Irish pork. The fluctuations were perhaps due to Continental supplies on the English markets. He did not consider that a dead meat trade would intensify the difficulty in this respect, as owing to the time required to cure bacon it should not affect the dead meat for some weeks.

The dead meat business could be developed better if there was an abattoir in Cork. It would suit people to dispose of portions of their supplies which the merchants could not take: there is always a market in England for the small weight pigs, and the medium ones could go to the streets. Labourers have now no outlet unless they sell all their pigs together finished.

He did not think there was more profit in feeding a pig to 6 stone than to 12, but they could be sold at a profit if they were kept going all the time. The smaller pigs could be sold as stores and the thunders kept on to finish. The Department could build the abattoir and leave it to the Corporation or County Council to work. It could be used for all classes of stock. The project had already been considered. He understood the estimate was £8,000 for a building to deal with 300 cattle, 1,000 sheep, and 1,000 pigs weekly. The Dames already had this trade, and whatever tended to increase the number of pigs in the country should be to the advantage of the carcase, as they would have a greater supply to draw from. Pork could be placed on the London market from Cork in fourteen hours. The existing trade was insignificant, and the rate as a consequence prohibitive, viz., 43/- per ton. Small pigs were at present selling at 8d. lb. in London; the price from local butchers in Cork

CORK, 1926 November, 1914.

Mr. C. Duggan—continued.

would probably be 6d. Heavier pigs are now shipped alive, but the tea house detentions told against this trade by increasing the amount of the charges.

He did not think the owners could do more than they were doing, but it would give feeders more confidence if another outlet were available. When the merchant wanted supplies he would buy them, but they appeared to be an understanding, he would not go further, that a certain price would not be exceeded. At the same time he thought the prices given were fair and reasonable in view of foreign competition.

The classification of pigs was too rigid. A cut amounting to 10/- might be made for 1 lb. overweight. When the bacon was finished he could not see any great difference in the price. There was also a cut if the pig was fat within the scales or was unfinished. The breeder was not in a position to discriminate so closely between the weights as was the merchant. He knew that grading was necessary, but there were too many grades, and the system was against the seller.

He would suggest subsidizing the labourer to the extent of a couple of pounds if he kept a sow and filled his garden to supply pig feeding. The scheme could be worked through the County Committee, and the Department might supply the funds. The expenditure would not be very large. He had himself got £100 out of a sow in one year, and this would be a big consideration to a labourer. No farmer who would be glad to avail of the scheme. The milk question might be a difficulty but it should be possible to get over it. Separated milk might be strengthened up. There was plenty to be got at 2d. a gallon, and in the country at 1d. and ½d. It would, however, stultify matters if milk could be done without. It was necessary for a short time only, as meat and potatoes could be fed at an early age. A few people only might be selected at the beginning of the scheme; and he believed that later on the subsidy would not be necessary as the profits would become evident and the scheme would continue to be kept.

It is a drawback to the R.D.C. cottages that a pig-house is not supplied; it was not an expensive item. It was essential that the cottager should have a pig to make manure for the garden.

The price of bought-in feeding stuffs as well as the first cost of stores influenced the labourer in keeping pigs also. Indian meal is the staple food, and lately the quality of this had been very inferior. The price of pork was, of course, also a factor.

Young pigs are usually disposed of at 8 to 4 months old, the present price being 25/- to 35/-. If the land were filled and wheat and oats grown a number of pigs could be turned out on an acre. Provided the houses were suitably fitted up very little attention was required with sows, much less than was usually thought.

Under existing conditions he thought labourers were inclined to give up pigs; and it would be desirable to interest them in the breeding. If fewer pigs were kept it was owing to the high cost of feeding and of husbandry. For the latter reason he suggested that a certain number of the labourers should keep sows.

He did not believe that poultry was as profitable as pig keeping. It was a slow way of making money.

The sanitary regulations had affected the number of pigs kept in towns, but many are still kept there. He recognized, of course, that in the interest of the public health it was absolutely necessary to enforce these regulations.

Mr. A. H. SUNNER, Member, Lonsborough, Beacons, Cork.

Stated that he preferred to deal in generalities, being at one side only of the trade, i.e., the marketing side. Not having had any practical experience of pig raising he did not wish to speak on that point.

He considered that the high price of feeding stuffs had a lot to do with the shrinkage in the pig numbers. Generally speaking, the sooner all interested in

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the industry were imbued with the idea that it is simple and one of the few staple industries left to the country, and that all must do what they can to keep it going and to secure markets, the better. Males ranged from 14s. 6d. in January, 1911, up to 15s. 6d. in December per cwt. of 250 lbs. In January, 1914, it commenced at a high price, though one of the witnesses stated that in that year, 1912, he made more money out of pigs. The Committee had the average price paid under that year. In 1913 males kept practically at the same figure and pigs maintained a regular high price, yet it is stated that more money was lost.

A shortage in pigs may be accounted for by the high price of feeding stuffs. The point he wanted to get out was that it was a live industry that could be made a better one. The owners cannot help themselves as regards the markets because they were competing with other countries. They had no more control over prices than the farmer who sells the pigs. Killings in Denmark are 50,000 a week; this is dropped on the same markets as the Irish. It is a fine article, and the British people appreciate it. If a lot of it comes on the market, and a lot of Dutch with it, the market breaks. Nevertheless the merchants must keep going. They find the best rule to be not to jump in and out but to keep steadily going and put a good against a bad market.

In contradistinction to Denmark the farmer in Ireland has so many things to his loss that he is sometimes induced, when prices for cattle are high, to turn from pig feeding to cattle, thereby upsetting the price, and vice versa. The Danes have not the same outlet for marketing beef, and the Danes do not raise beef to the same extent as is done in Ireland. There are delaying countries, and pig-feeding is the sole means of marketing the bye-products. This is not necessarily the case here, and incidentally accounts in a great measure for the fluctuations in supplies.

The price of feeding stuffs and pork alone did not affect it. The price of meal is something high just now; and a farmer who is not satisfied with pigs may be tempted to go in for cattle entirely. Probably a little more tillage would improve matters. People in this country are too dependent on the supply of maize. It is a food that is readily assimilated and gives a speedier return than potatoes. But he did not say it was more profitable. The reason which Irish pigs and bacon had gained was due to the potato-fed animal, and he considered that the potato-fed pig sold better than the Indian meal fed one.

He did not know whether a smaller quantity of potatoes is being grown, but if there were more potatoes he thought there would be more food. He did not understand that side of the business. His view generally was that there was not so much grown in 1911, 1912, and 1913 as had probably been grown this year.

Mr. GIBSON pointed out that there had been very little variation. The figures were in round numbers:

1909	...	...	570,000	acres.
1910	...	...	593,000	
1911	...	...	561,000	
1912	...	...	585,000	
1913	...	...	582,000	

Mr. Sunner, continuing, said that pig feeding is largely carried on in the rural districts, but there is a serious falling off in the towns. It was the difficulty members of the honours classes who kept pigs in the cities. Whilst he had no objection to the sanitary laws, they cut off these people and the municipal body did not make any provision for allowing them adequate facilities for carrying on the industry. Ten years ago the aggregate number of pigs in the city of Cork would be about 600 per week; now there were practically no pigs in Cork market, and that meant a big reduction in the supplies.

He would not say that the class of pork was quite as good, but a large percentage was very thin; 20 or 25 per cent. might be second rate.

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Mr. A. H. Sumner—continued.

Mr. A. H. Sumner—continued.

The shrinkage was due entirely to the sanitary regulations. He agreed that it was necessary in the interests of the general public that these should be enforced. The only exception he took was the way in which this was done.

These lards were put into operation some years ago, and would perhaps not bear on the shrinkage in 1913 to any great extent. The supply, however, was not stopped all at once.

Mr. Gannon.—The Department's annual returns show that the number of pigs in the county of Cork were roughly:

1905 ...	127,000
1906 ...	136,000
1907 ...	154,000
1908 ...	158,000
1909 ...	134,000
1910 ...	139,000
1911 ...	143,000
1912 ...	159,000
1913 ...	135,000
1914 ...	161,000

The number has, therefore, gone up since 1905. He wished to know whether the increased number kept in the rural districts had not counteracted the number cut off in the cities.

Mr. Sumner.—This investigation is to ascertain why and how the number can be increased. If the rural districts had improved it bore out what he said. It would be advantageous if they had that increase plus what the city formerly supplied. Cork used to market from 800 to 1,200 pigs per week—there was a weekly market. That multiplied by 52 would give a large number. The number now is 12 and 15, up to 30. The former supply would run two packing houses and give employment to about 200 people. These pigs were all fed in the city; they came in as sheep. He thought the reduction in the number synchronised with the enactment of the sanitation laws—probably ten years ago. He agreed that the number in the rural districts of Cork is increasing, and in the West, especially, he thought the industry is quite up to normal.

He considered that the quality of the pigs the curers were getting was excellent. The Scotch of Ireland merchants had put out bacon long before the Department; and the breed favoured was the Large York, for the reason that it produced a more typical side of bacon. They had nothing to say to the Ulster type, which was a fine class of animal, but it did not suit their trade. It is essentially a shorter and deeper pig, shirky and well finished, and suitable for the Northern roll bacon trade. The southern curers make up long sides—designated Wiltshire cut. They wanted a long narrow pig, standing low. The pig they had evolved was the Large York and it gave a side of bacon more nearly suitable than any other breed they knew. Those who use the Wiltshire cut will not buy the Ulster from the southern curer except at a smaller price. When turned into roll, however, the White Ulster commands top price because it suits the district it goes to. The Southern curers had one or two sample lots of the Ulster bred and got into trouble with them.

It is the feeling of the curers in the south that the Ulster pig is unsuitable for their trade, and that it would be a mistake for the County Committee to give premiums for this breed.

Until the south has a trade similar to the north of Ireland they did not want this pig. They said, of course, even anything they had a market for, but they were not likely to have a market for the Ulster pig. The southern curers had specific rules and the northern men had theirs—and for each there were specific markets.

In the south, therefore, the same price cannot be given for the Ulster as for the Large York and the feeder could not get the same return, and would not be encouraged to keep them.

The curers tried the Berkshire some years ago, but there was a great objection to it. The bacon and heads had an objectionable appearance that made the public give a lower price, and in other respects it was not equal to the York. He believed that the black was a filthy animal, but not from the curers point of view; it fattens on poor stuff but makes sloppy bacon. The quality is not so good.

The Large Black had been kept in the south and on the east coast of England, but the Wiltshire people had turned it down in favour of the Large White York. They are finding out what the southern curers discovered years ago. The percentage of carcase meat, such as the shoulder and head, is more in the Black than in the York in proportion. When coming to the retail price it is roughly 4d. for the head, 7d. or 7½d. for the shoulder, and 100/- for the middle and ham. If there is a greater proportion of 100/- meat, then naturally the pig giving the most prime cuts is preferable. There was some years ago a number of the black pigs but the bacon curers gave a smaller price, and represented to the Department that they were unsuitable for the southern trade. As a result, he understood that the County Committee ceased to give premiums to that breed of boars, and he thought it was a wise decision.

There is absolutely no truth in the suggestion that the bacon curers combine to arrange the maximum price for certain markets on certain days. The bacon curers work and fight independently so far as his experience of the trade was concerned. He had heard it mentioned that this was believed by the public or that the public had a suspicion of it, but there was no ground or date for such a belief.

The bulk of the Irish stuff is not sold f.o.b., it is not an out and out sale. It is assigned to the London market. The merchant knew as much about the price when consigning it as the Committee did. They had to fight the best they could to make the price, which was regulated by the Continental price. If the Continental price was scarce the Irish stuff commanded a good price and merchants try to get their supplies to meet that. F.o.b. sides form but a small proportion of the output of bacon. When the market breaks the curer is caught. It takes roughly a fortnight to convert bacon from the dead to the cured state, probably three weeks. A high price may have been paid for the pork and the market drops. The merchant is not a philanthropist and he must drop his price accordingly.

It could not happen in a week that the price ranged from 45/- to 55/-. It might happen from the beginning to the end of a month. That would be due to the markets on the other side. Supposing Friday's market in London went up from 2/- to 3/-. Monday's price for pigs was advanced accordingly. They go up and down that way. Although the curers do not get credit for it, they often keep up the first cost when it may be detrimental to them. They know that the fluctuations cause trouble, and the price is often kept up because it would be against feeding to bring it down. As a general rule the price obtained by the curer for bacon had a direct influence on the price paid for the pig. The price of pork ribs and side with the price received for the bacon which, of course, fluctuates. Business men as a rule find it a wise policy not to go by any one month or any one set of weeks, but to work it all over the year and put the bad market against the good and hope to come out right at the end of the year. The merchants have cannot make markets; they live by this industry and must keep going. If the curers of pigs adopted the same policy he would find it to pay in the long run.

He recognised that unfortunately these fluctuations had given the agricultural community an idea that they have not been as fairly dealt with as they should be, but it would not be possible to have a uniform price. If a guarantee was given that the Domes would be kept in order then the Irish merchants would give any price.

Times is another factor. He did not think that ten years ago there was a side of bacon produced in Holland competing against Irish producers in the English markets. At present every one of the main

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handling fresh pork in Holland is going into the bacon curing. One firm is sending 3 to 4 thousand hales to London weekly. Instead of the Dutch being so prepossessed with the fresh pork trade they are getting out of it and on to the sliced bacon trade, to the detriment of the Irish curers.

As regards an abattoir, some 25 years ago his firm approached the municipal body in Cork and told them that in return for the concession of dressing all the pork, beef, and mutton supposed to be dressed around the liberties of and in Cork his firm would build the carcass themselves. His firm had plans submitted for a cost of £25,000, including cold storage. The project was considered because at that time there were serious complaints about the nuisance created by the slaughter houses in the city. The tanning trade has now practically died out in Cork. In his time there were at least half-a-dozen soap factories, and these also are gone. If an abattoir were there, no matter who had it, all the bye-products would be worked up and it would be a decided advantage to the labour market of Cork and the live stock industry generally.

His recollection did not carry him back to anything so drastic as 10/- being deducted from the price of a pig on account of overweight, but there certainly is a cutting. A grade must be established. Any pig from 11.5 down runs into a suitable side of bacon. Over that means a heavy cut on the London market. This cut could not be regarded as a serious drawback to the feeder. That class of pig is pointed out to the seller and he is given every opportunity to dispose of it otherwise. At present the price for pigs over 11.5 is 11/- per 20 lb. That is comparable with the price of suitable bacon. Feeders of such pigs have a dual outlet. If not satisfied with the current price they can give them to the shipper.

The bacon curers supplied hams from three sources, Waterford, Limerick, and Cork. When the Department took it up the Limerick source was shut down, and Waterford has not been worked to the same extent, but Cork still goes on. The hams are bought and given out to approved parties and changed every year. That scheme operates in Cork and Kerry and runs into Tipperary. The Department are doing the work more fully than ever his association did, and with marked success.

With regard to the decrease in 1913, he agreed that the average price for pork in 1911 was—August, 31/-, September, 32/-, October, 40/-, November, 43/-, December, 45/-, and January, 1912, 46/-. Roughly 48/- a ton was being paid for meat, and pork sold at 45/- to 46/-. That left no profit unless the farmers could add a proportion of foods grown by themselves.

Pig breeding and feeding should be worked as a continuous industry, and should not be abandoned when there were temporary losses. It is naturally unsatisfactory to a man who is keeping a few pigs to find that they are not paying, and the consequence is that he gets out of them. When the market improves he is not then in a position to reap any benefit.

He was inclined to agree that the correspondence between the high meat and potatoes was the principal cause of the succeeding dearth of pigs. It happened all over the world. Stocks of pigs in Germany, Holland and America were greatly depleted that year. Denmark, where the industry was worked on the principle he suggested, was least affected. They are more gritty in their methods there, and they resisted the storm, but they have not the same alternatives as other countries had. They are not a beef raising country and are bound to look upon pigs as their staple industry. This country is different; the policy here may not be wise, but it is natural. He agreed that the duty of the Department should be to act as adviser to the community and to look forward. If an increased quantity of home products was available those fluctuations might not be so frequent.

One firm on the London market does or fails the market as they find it. The prices given are official. The same obtains with regard to Danish and Dutch

Mr. A. H. Smeaton—continued.

bacon. Then there is the loose market, i.e., for hams without any established reputation. There is a great difference in the official quotations and the prices for loose bacon. If the figures quoted averaged the two they would be correct, but if taken from the official quotations would be no guide. If first quality is taken as the official price and second quality to represent the loose, that would be about it.

Pigs from an ordinary tillage country are preferred. Some regard might be had to a particular district. In districts where grain are largely used good pork would not be looked for at certain months of the year, and the price is not as good for that district.

Carrage back to Cork is allowed for, but all pigs on one day are the same price no matter where they are bought. The price is fixed for the day and that covers everything. The main supplies are got from the fairs.

The pigs are selected on the left. A soft bad pig is culled at once and again when the bacon goes out.

Mr. T. O'SULLIVAN, Crookstown, Co. Cork, appointed by the Cork County Committee of Agriculture.

Stated that his experience related principally to West Cork. He considered that the comparative price of pork and feeding stuffs were mainly responsible for the number of pigs kept.

Feeders were dissatisfied with the cuts for overweight. He had been cut 6/- per cwt. in a lot of six under 14 lbs. of standard weight. If so, of course, he recognized that the merchants have to give the weights their customers require, but the cut is too much for the slight difference. Two shillings should be sufficient in within 7 lb.

It was considered that pigs could be more economically raised to a higher weight, and that the overweight should be brought up to 13.14. It was preferred to sell all the hams from one litter at the same market, even though there should be variations amongst them.

The serious fluctuations in prices, which were occasionally 6/- to 10/- in a fortnight, did not help the industry.

Steers are fed principally on Indian meal and pollard, supplemented by separated milk. Potatoes are grown to a small extent only and are little used for fattening. A little cabbage is given, and the pigs are allowed to run out on the grass for a while. Meal was mainly relied upon for fattening. To make pigs pay, 50/- was required for the pork when meal was 35/- a sack.

Fine meal was usually bought for pigs, and coarse for the fowl. The two are kept separately. The labourers were going in more for poultry than pig feeding; they were better satisfied with the returns, especially at present. They have not the facilities for both pigs and poultry. The farmer, however, would probably not drop pigs.

Bottles were dear in 1910, 1912, and 1913. This year the average pig of from 12 to 14 weeks could be got for 30/-, but even though the price is reasonable labourers are not tempted to go in for pigs; they complain more of the price of feeding stuffs than anything else.

There are co-operative societies in his district, and the system is to give back the separated milk, as well as a proportion of the buttermilk. It went mainly to calves and the rearing of a certain number of pigs. Labourers or cottagers could not get this milk except at a prohibitive price. Even in summer there is no surplus, and every supplier could do with more. The labourer had consequently no milk to keep a sow.

COBK, 10th November, 1914.

Mr. D. TWOMEY, Live Stock Inspector to the Department of Agriculture.

He had for some years acted as inspector in the southern counties; he had inspected the pigs reared for bacon, and also had to do with purchasing and promoting them in the Congested Districts of Cork and Kerry.

Since the investigations of this Committee have special reference to the causes which led to the decrease in the numbers of pigs raised in Ireland in 1913 as compared with previous years, the consequent scarcity of bacon and falling off in trade generally, he proposed to deal with that particular point at the outset. The following table showed the numbers of pigs in Ireland by decades from 1851 to 1881 and each year from 1881 to 1914 inclusive, with the average price of pork in each year since 1881.

Year.	Total No. of Pigs.	Average Price of Pork per cwt.
		s. d.
1851	1,084,357	—
1861	1,102,042	—
1871	1,621,423	—
1881	1,625,630	52 3
1882	1,458,128	51 0
1883	1,343,364	49 1
1884	1,308,580	45 11
1885	1,369,092	44 6
1886	1,263,142	43 1
1887	1,408,454	40 5½
1888	1,367,625	42 5½
1889	1,580,679	43 10
1890	1,570,366	60 1
1891	1,367,712	39 5½
1892	1,113,472	48 2
1893	1,152,417	51 6
1894	1,380,842	41 11
1895	1,358,404	53 11
1896	1,464,586	30 0
1897	1,327,456	42 0
1898	1,295,212	41 8½
1899	1,302,310	37 5½
1900	1,908,312	44 0½
1901	1,219,135	46 11½
1902	1,327,616	49 2½
1903	1,383,516	45 10
1904	1,315,120	41 10½
1905	1,164,316	49 5½
1906	1,244,193	50 11½
1907	1,317,668	50 1
1908	1,317,669	48 0
1909	1,149,179	58 5
1910	1,200,605	60 3
1911	1,415,119	51 0
1912	1,323,557	55 1
1913	1,050,300	63 7½
1914	1,308,438	60 8½

\*The average price in 1913 is the highest reached since these statistics were first compiled in 1881. The average prices in the four provinces in that year were: Leinster, 62s. 6d.; Munster, 68s. 9d.; Ulster, 65s. 9d.; Connaught, 62s. 9d.

† Average for the six months ended June, 1914.

From this it will be seen that periods of high production and low prices almost invariably alternated with periods of low production and better prices. In other words, good prices induce farmers to take up bacon raising more extensively; then with the increased output prices fall and farmers are obliged to reduce their stock of pigs. Taking the period of five years from 1887 to 1891 inclusive, it will be noted that the numbers are fairly consistent and high, the average being 1,425,600; also that during this time the price of bacon was comparatively low, the average being 41s. 6d. per cwt. Then came a reduction in numbers for two years, 1892-3—average 1,132,944, and

Mr. D. Twomey—continued.

prices improved considerably, the mean for the two years being 48s. 7d. per cwt. Following that, from 1894 to 1904, inclusive, is a time of high and steady production, average 1,323,415, with lower prices, average 42s. 16d. per cwt. In 1905, when the pig population numbered only 1,164,316, prices improved to 49s. 0d. per cwt., the lowest average for the succeeding two years with the exception of 1898.

The point he wished to make was that whenever farmers increased their numbers above normal, prices are low. This induced farmers to sell off, with the result that prices went up again.

Coming to the last decade and what more immediately concerned the Committee, it would be noted that both numbers and prices are fairly steady from 1906 to 1910 inclusive. In 1911 and 1912 there was a considerable increase, and in 1913 a marked decline, the numbers being 500,378 below average for preceding two years. The question then arises, to what causes may be attributed this sudden and sharp decrease. In meeting farmers, bacon curers, dealers, and other persons interested in the bacon trade, one heard a great variety of opinions expressed, and the following were some of the views frequently put forward by representative persons. These were supposed causes, he did not put them forward as his own opinion:—

1. Farmers had been reluctant to feed pigs owing to the scarcity of labour and farm hands refusing to do this work.
2. Bows producing small or inferior litters owing to inbreeding.
3. Bows aborting.
4. General tendency on the part of farmers to alter their system of farming in favour of stock outside raising.

Whilst one or other of these causes may have an influence on the numbers of pigs produced he was inclined to think that this would occur to a limited extent only, but since great importance had been attached to some of the points, he proposed dealing with each separately.

1. Owing to the drain of emigration and the attractions of town or city life there certainly is an increasing difficulty in procuring good farm hands, male or female, but that is most noticeable in districts where the rate of wages is low, employment intermittent or uncertain and where there is no real and substantial inducement to the young people to take up farm work as an avocation. From his own experience he was convinced that where regular employment at good wages could be assured there is, comparatively speaking, little difficulty in procuring good labour. The result of his inquiries would go to show that farm hands do not as a rule make any objection to taking part in the work of raising and feeding pigs.

In this connection it was well to bear in mind that the largest proportion of the pork is produced on small sized holdings on which outside labour is not employed.

On such small farms the members of the family do the whole work, and it will be admitted that people of this class are just as hard working and thrifty to-day as ever they were. At all events it must not be assumed that they were less industrious in 1913 than in 1911 or 1912. His experience was that small holders do not shirk work of this nature provided they consider they are adequately compensated. Further, the preparation of the food, especially where hailing or cooking is practised, may be regarded as the most laborious portion of the work, and since the feeding of pigs on raw meal has come into vogue this particular difficulty has to a large extent disappeared. A leading porker of Ireland told a merchant recently informed him that ten years ago he sold ten tons of coarse or middle cut Indian meal for each ton of fine meal, and now his books show that the figures are exactly reversed, and he is of opinion that this coarse meal purchased is largely used for feeding poultry and cattle. Such a change means a considerable saving of labour as well as saving in cost of fuel, not an unimportant item. Experiments carried out by the Dis-

CORK, 16th November, 1914.

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partments at the Agricultural Stations and also at a great number of farms in Ireland under the supervision of the County Inspectors had shown that (a) pigs can be fattened successfully with raw meal, (b) the average daily gain in live weight was greater when meal was fed raw than when cooked into porridge or slatmeal, and (c) when the meal was fed raw less food was required to put on 1 lb. or 1 cwt. increase live weight. This is a most important matter, and if the labour question has in the past militated against the more extensive production of pork, the trouble now to a large extent be avoided by the use of raw foods.

He would call a man holding less than 50 acres a small farmer. The daughters of such farmers would feed pigs, but many of them go into the drapery and other businesses. With these farmers the labour difficulty is not so acute as it appears; they have no servants; the fifty-acre man in Cork has no servant; of course if a man had no family he would have to employ labour, but the probability is that such a man would not keep pigs. Where a farmer has few pigs he would feed them himself and let the labourer do other work.

3. Sows producing small or inferior litters owing to inbreeding.—By inbreeding is meant the mating of animals closely related or from the same parent stock or strains. If persisted in, less of vigorous results, with attendant evils. It is not, he was satisfied, knowingly practised by farmers, and would only occur in the event of the boar used being related to the boar previously at service in the district, assuming that the female progeny of the latter animal was retained for breeding purposes. So far as operations in connection with the Department's schemes are concerned care is taken that boars from the same lands or of similar strain are not sent to the same district in succeeding seasons.

The breeder curers in the south of Ireland had stated that pigs showing absence of hair and a tendency to excessive fatness are not suitable for their trade. Complaints were received on more than one occasion from these curers that pigs from certain areas exhibited these faults, and on investigation by the Department it was almost invariably found that the boars used were mongrels of an inferior type or belonged to the Large White Ulster breed. Upon inquiry it was ascertained that the son of the litter was not, however, in any way affected, the objection being that such boars do not produce the kind of bacon pig which southern curers require for their trade. In the North the Large Ulster breed is held in high esteem by both farmers and curers; the animals are suited for and used for a different class of trade, i.e., roll bacon instead of long sides.

3. Sows aborting.—He did not know of any aggravated cases. There might have been occasional instances of sows slipping their young as the result of some injury received, but in this country there is so far as he was aware no disease amongst swine corresponding to congenital abortion amongst cattle.

4. Increase in cattle raising industry.—The following table showed the changes in the total numbers of cattle which have taken place in the period 1851 to 1914. At the same time it should be remembered that statistics are only one indication of change and that the improvement in quality of stock is equally if not more important.

Year.	Number of Cattle.	Number of Sheep.
1851 ..	2,507,401	2,122,128
1861 ..	3,471,688	3,559,050
1871 ..	3,976,372	4,213,436
1881 ..	3,969,595	5,256,185
1891 ..	4,648,511	4,722,168
1901 ..	4,973,323	4,378,750
1911 ..	4,711,720	3,607,436
1912 ..	4,646,698	3,828,829
1913 ..	4,932,625	3,693,724
1914 ..	5,051,645	3,603,581

Mr. D. Twomey—continued.

Side by side with this increase in cattle there had been a decrease in the number of sheep and in the area under tillage, and this latter factor may possibly have had some influence generally on the number of pigs raised by farmers, but so far as one can learn in moving about the country, farmers who have added to their cattle numbers have not gone so systematically for a reduction in their stock of pigs.

If the increase in number of cattle was accompanied by a reduction in the number of milch cows such a reduction would in all probability have an effect on the number of pigs reared, but from the following table it would be seen that that number of cows had also increased:—

1904 .. ..	1,497,647
1905 .. ..	1,467,084
1906 .. ..	1,490,284
1907 .. ..	1,581,463
1908 .. ..	1,586,425
1909 .. ..	1,545,930
1910 .. ..	1,557,584
1911 .. ..	1,506,418
1912 .. ..	1,508,886
1913 .. ..	1,603,520
1914 .. ..	1,638,920

The total number of milch cows (including heifers in calf) in 1914 is the highest on record since 1850.

As previously stated, it was possible that the causes above enumerated might affect bacon production to some extent, but he did not believe their influence was very powerful, and he came now to what appeared to him to offer the best explanation of the scarcity in 1914.

In the fall of 1911 and during the first four months of 1912 the price of bacon was comparatively low and the cost of imported feeding material comparatively high. The following table for the years 1911, '12, '13, and '14 showed the price per cwt. of bacon at Marston fair, held on the Tuesday of each month:—

	1911.	1912.	1913.	1914.
	s. d.	s. d.	s. d.	s. d.
January ..	54 0	44 0	37 0	42 0
February ..	53 0	51 0	40 0	40 0
March ..	53 0	52 0	46 0	42 0*
April ..	55 0	52 0	44 0	40 0
May ..	51 0	57 0	45 0	35 0
June ..	54 0	59 0	45 0	36 0
July ..	63 0	50 0	70 0	52 0
August ..	51 0	63 0	45 0	48 0
September ..	52 0	59 0	40 0	43 0
October ..	40 0	50 0	40 0	40 0
November ..	45 0	50 0	37 0	—
December ..	43 0	52 0	58 0	—

\* No fair owing to restrictions.

Table showing average monthly retail price of Indian meal per 2½ cwt. sack (fine), which is 6d. per sack more than price of coarse meal:—

	1911.	1912.	1913.	1914.
	s. d.	s. d.	s. d.	s. d.
January ..	16 0	20 0	17 9	17 6
February ..	16 3	21 6	17 9	17 6
March ..	16 3	21 0	18 0	17 6
April ..	16 3	21 3	18 3	17 9
May ..	16 3	21 0	18 3	18 3
June ..	17 0	21 3	18 0	18 9
July ..	17 0	20 0	17 9	18 9
August ..	17 9	17 0	17 6	23 9
September ..	18 6	19 9	17 0	22 6
October ..	19 9	18 0	17 9	21 9
November ..	20 0	18 9	17 9	20 9
December ..	20 0	17 9	17 0	—



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Mr. D. Twomey—continued.

Mr. D. Twomey—continued.

These figures may be taken as a fair indication of markets generally at that period. It would be noted that at the close of 1911 and in the early part of 1912 prices both of pork and feeding stuffs were adverse to farmers, and many of them considered that they were at that time fattening pigs at a loss, with the result that they sold off or reduced considerably their stock of brood sows.

The following table shows the number of boars and sows in Ireland each year from 1905 to 1914, inclusive:—

Year.	Sows.	Boars.
1905	121,640	1,734
1906	134,478	1,854
1907	142,405	2,109
1908	123,568	1,839
1909	120,483	1,791
1910	129,707	1,779
1911	149,315	2,113
1912	150,842	1,889
1913	165,410	1,894
1914	133,188	1,938

The abnormal clearance of breeding stock went on well into the close of 1913, and here, he thought, was the chief cause of the shortage of pigs in 1914, and incidentally the explanation of the decrease in numbers of pigs in other periods as well. Greatly increased cost of production accompanied by a serious depression in prices made pig feeding an unprofitable branch of the farmers' business. When prices were high there was also the inducement to sell young sows for pork instead of keeping them as breeding stock.

The question of profit or loss in pig feeding depended mainly on three factors:—

1. Cost or value of bonehams.
2. Cost of feeding stuffs.
3. Price of pork.

There were, of course, other matters such as the class of pig kept, shorthorns of the animals, etc., but these concerned are the principal. The cost of bonehams, when purchased at three months old, varies from 20/- to 38/-, and of feeding stuffs, say, from 15/- to 21/- per sack, but the price of pork varies most of all. Farmers had sold pigs at 7½/- per cwt. and again in other years at 39/-, slightly above half the higher price.

The following table gives an estimate of the profit derived from or loss involved in the feeding of pigs for each month from September, 1911, to August, 1912, inclusive, and at other periods, taking the current price of pork each month and the average price of meal during the preceding three months, i.e., during period of fattening:—

Month.	Value of Animal.	Total Cost of Production.	Profit.	Loss.
	s. d.	s. d.	s. d.	s. d.
Sept. 1911	78 0	67 0	11 0	—
Oct. "	73 6	68 10	4 8	—
Nov. "	67 6	70 4	—	2 10
Dec. "	64 6	71 8	—	7 2
Jan. 1912	69 0	72 2	—	3 2
Feb. "	77 6	72 2	4 4	—
March "	78 0	72 10	4 2	—
April "	78 0	74 4	3 8	—
May "	85 6	74 4	11 2	—
June "	88 0	74 2	14 4	—
July "	84 0	72 8	10 4	—
Aug. "	94 0	70 8	23 10	—
Sept. 1912	106 0	67 6	37 6	—
Oct. "	78 0	68 8	9 4	—
Nov. "	102 0	71 10	30 2	—

The same basis of calculation is employed throughout in regard to price of bonehams and amount of food consumed. Cost of bonehams weighing about ½ cwt. is put down at 24/- each (approximate cost of mairing). Amount of meal required to fatten such a boneham to 2 cwt. live weight or 1½ cwt. dead weight is estimated at 5 cwt., and cost of milk is estimated at 7s. 6d. per animal. Since the kind and cost of food and also the cost of bonehams may vary a good deal these figures are not put forward as a precise representation of the profit or loss on pig feeding in all instances; they are merely intended to indicate how variations in the prices of pork and food stuffs affect the farmers' profits. It will be observed that it is the current price of pork more than the cost of food which determines whether pigs are fattened at a profit or a loss.

He would draw attention to the first column—value of animal. The value in December, 1911, was 28s. 6d., and in July, 1912, 25s. 6d., a difference of 40/6. In the second column it would be seen that the lowest cost of production was in September, 1911, and the highest in May, 1912. The difference in cost of production was only 7s. 4d. It would, therefore, be seen that the price of pork was the determining factor. He knew of one instance where 17s. 6d. each was lost on a number of pigs; the accounts had been accurately kept.

Apart from a general depression extending over a lengthened period farmers are deterred from producing pork in greater quantity owing to the way in which prices fluctuate from week to week or from market to market. At times prices drop sharply without any good reason so far as the wholesale or retail prices of the finished article serve as a guide to the outside public, and these fluctuations have undoubtedly given farmers the impression that they are not being fairly treated by the buyers. There may be no ground for such an idea and the current may have good explanations to offer, but a continuance of a series of fluctuations of this nature does eventually breed suspicion whether justifiable or not, and militates against steady production.

He referred to a report in the *Irish Times* of the last Midland fair in which it was stated that there was a good show of pigs, a depressed trade, and clearance effected with difficulty at from 30/- to 35/- per cwt. The quotations in Cork were 28/-.

The great increase in the numbers of poultry kept in Ireland and the consequent increase in the value of the exports of poultry and poultry products had also affected the raising of pigs, and from personal observation he knew that poultry had taken the place of pigs on many a small farm and cottage hold.

The following table showed the combined value of poultry and eggs exported from Ireland, 1908 to 1912, inclusive:—

Year.	Value.	Price of Eggs per 120.
	£	s. d.
1908	3,326,523	8 4½
1909	3,720,479	9 0
1910	2,971,155	8 8½
1911	2,791,153	9 0½
1912	3,964,353	9 2½
1913	4,666,686	9 5½

From this it would be seen that the value of the animal exports had increased by nearly half a million between 1908 and 1913. Farm labourers do not, so far as his experience went, suffer nearly so many pigs as formerly, and in some districts they had given up the business altogether. He believed this to be due to the fact that they keep more poultry and of an improved type. The farmers and labourers say poultry pay better.

Another factor which might have influenced the supply was the potato crop, particularly where it is

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Mr. D. Twomey—continued.

largely used for pig feeding, as occurs in many districts. The average yield per statute acre for each of the years 1906-1913 inclusive are as follows—

Year.	Tons.	Average.	Average Price per cwt.
1909 ..	5-6	579,799	3 10½
1910 ..	4-8	592,955	3 3
1911 ..	6-2	591,292	3 6
1912 ..	4-3	595,184	3 6½
1913 ..	6-4	582,303	3 9½

It would be noted that the average yield in 1912 was considerably under the average of the two years, and this shortage might possibly have affected the output of pigs at the end of 1912 and in the spring of 1913 as farmers would probably be obliged to purchase more imported food stuffs.

The type or breed of pig kept would naturally affect in no small degree the farmer's profits, and therefore the number produced. He comes now to deal with what has been done in regard to improving and maintaining a good parent stock in the country. The Bacon Curers' Association had done much good work for keeping boars in various districts, and so persons their representatives would place before the Committee details of the arrangements and of the operations in connection with their scheme.

In the year 1887 the Royal Dublin Society were given a Government grant of £5,000 to be expended in the improvement of live stock, including swine. This was administered by the Society annually up to 1902 when with the concurrence of the Society it was transferred by Act of Parliament to the Department of Agriculture, which commenced operations in 1903.

The Department's scheme for encouraging improvement in the breeds of pigs was first put into operation in 1901. In the first year 31 out of 43 counties in Ireland took up the scheme, and in every year since all have done so. Each county raises a rate of from 1d. to 1s. in the £1 for Agricultural and Technical schemes, and the Department supplement this by a direct grant provided the scheme as adopted by the County Committee is approved.

The scheme for the improvement of swine takes the form of subsidising the sire, and is briefly as follows. The County Committee offer annually a number of subsidies in the form of premiums to owners of High class boars of certain specified breeds on condition that small farmers of a certain valuation can have the use of such boars for their sows at a nominal fee of 1/- per sow. The Committee issue advertisements offering a number of premiums, and from among the applicants the requisite number of premium holders is selected. The Committee also decide the breed or breeds to be subsidised. He would emphasise this because there was an impression that the Department were endeavouring to force certain breeds on the country. The Committee, however, had absolute discretion in this matter, so well as regards the valuations of owners of sows and many other details. The premiums may be continued for two years if the boars prove satisfactory and are properly kept. To ascertain this they are inspected by the Department at the end of the first year. The value of a first year premium is £5 and of a second year premium £3.

With regard to the supply of young boars for the purposes of the scheme, they are bred by a number of private individuals in Ireland and also at the Department's farms. They are inspected by the Department when they have passed the age of five months, and such as are considered eligible for premium purposes are branded; they are then sold to applicants at a standard price of £5 each, the Department paying most of the cost of carriage.

Mr. BORN.—When boars are scarce this system is freely utilised. When inspected at five months old any boars not required are left on the breeders' hands; so that instead of having an ordinary pig to sell he

Mr. D. Twomey—continued.

has a boar, which is worth little for killing. The Department should inspect the pigs at three months old, so that any they don't take could be castrated; when allowed to go to five months they mean a loss to the breeder.

Mr. O'MARA concurred. If that occurred very often breeders would not rear those boars.

Mr. Twomey, continuing, said the Department inspect the boars at five months old and send them out soon afterwards, but must wait until the premium holders are selected. The boars may be branded and probably there is no demand for them for a week or fortnight. From August to October there is usually a difficulty in placing them. Pending the coming into operation of the new scheme in October premiums cannot be awarded, and the boars that have stood our year have to be inspected to see whether they are suitable for another, and until the County Committee know how many of the old boars are being retained they cannot select new applicants. The inspection usually takes place in November and December. About January the Committee meet and select new applicants; from September to December, therefore, there is no great demand for boars. In order, however, to take stock of the breeders' hands the Department purchase at this time the supplies for the Congested Districts. Naturally breeders complain that they have sometimes to keep boars until seven months old and then get £5 only. To remedy this perhaps the Department should notify breeders when there will be the greatest demand for boars and when none will be required.

The pig is not suitable at three months old. Inspection is done as soon as possible after five months. They are not fit to go out until six months old.

Mr. WALLACE agreed that the boar was no use for service at five months.

Mr. BORN.—Are many of the boars selected finally left on the breeders' hands?

Mr. Twomey replied that to his knowledge the number was very small, and none at all in the south of Ireland.

Mr. WALLACE concurred.

Mr. Twomey.—There may be a glut at a particular time of year, but he did not see what could be done with boars at three months. If they were branded at three months the question would arise whether they were to be sent to the premium holder or left with the breeder. The latter would have an inducement to give them the same good treatment as if the animals were awaiting inspection; they would simply be regarded as the Department's property. While if the animal were sent out the premium holder would see the animal too soon.

Mr. BORN.—The proper way perhaps would be to buy when three months old, but not at £5. The supply of boars was short two years ago. Pigs were worth more for killing. Could they be bought at three months for, say, 30/-, and kept on at the Department's farms?

Mr. WALLACE.—The bacon curers used to pay £3 at three months and keep on the boars themselves.

Mr. Twomey.—It would be expensive, and some of the pigs may not prove suitable at five months. It would also mean congregating pigs from different places.

Mr. WALLACE.—Pigs from different places cannot be mixed. He had great trouble in keeping pigs for the Department. A strange animal cannot be put in amongst others.

Mr. Twomey said that when breeding pigs he endeavoured to inform the breeder how long he would have to keep the boars. Mr. Boyd's objection would perhaps be got over by sending a circular to breeders telling them when there is likely to be a demand.

Mr. O'MARA.—Why not send a circular a few times a year? The Department should know the breeders of these pigs, and the number approximately required.

Mr. Twomey agreed. The breeding of boars for premiums was actually a voluntary business, and the breeder had to run a certain amount of risk.

Arrangements are also made by the Department whereby selected applicants may get possession of the premium boar on payment to the County Committee

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Mr. D. Twomey—continued.

Mr. D. Twomey—continued.

of a deposit of £2, the balance of price being deducted from the value of the premium at end of first year. The majority of applicants avail of this provision.

The following table shows the number of premiums given each year since 1900 and the total annual expenditure in connection with the scheme:—

Year.	Amount Allocated.	Number of Premiums.	Amount Expended.	Special Premiums.	Amount.	Total Premiums.	Total Expenditure.
	£		£				£
1901 ..	2,395	161	732	—	—	161	732
1902 ..	2,685	154	725	—	—	154	725
1903 ..	2,530	181	875	—	—	181	875
1904 ..	2,670	129	624	—	—	129	624
1905 ..	1,740	205	840	10	50	215	890
1906 ..	1,538	259	1,141	23	99	282	1,240
1907 ..	1,618	287	1,171	51	233	338	1,404
1908 ..	1,570	281	1,144	49	191	330	1,337
1909 ..	1,709	319	1,252	49	213	368	1,465
1910 ..	1,854	334	1,419	80	342	414	1,767
1911 ..	1,801	390	1,635	97	405	487	2,043
1912 ..	1,900	385	1,604	100	448	491	2,053
1913 ..	2,008	391	1,600	112	486	503	2,065
1914 ..	2,090	431	1,825	123	542	565	2,367

It would be noted that the number of premium bears standing at service in Ireland has increased from 151 in 1901 to 503 in 1914, and the total amount expended has increased from £704 in 1901 to £2,367 in 1914.

Even from 1900 there has been a greater demand for bears, and breeders are rising more.

The following table shows the total number of bears in Ireland in each year from 1905 to 1914 inclusive:—

Year.	Number.	Year.	Number.
1905 ..	1,736	1910 ..	1,779
1906 ..	1,856	1911 ..	2,113
1907 ..	2,160	1912 ..	1,859
1908 ..	1,939	1913 ..	1,696
1909 ..	1,791	1914 ..	1,938

Whilst the total number of bears has been roughly about 2,000 the number of premium animals in recent years has been about 500, or 25 per cent. of the total. Although the total fell in 1913-14 the number of premium bears increased. This was largely due to the fact that the Inspector or Instructor made efforts to replace a bad bear where possible. The County Secretaries, however, should do more in this respect and not wait for applicants, but should seek them out, so as to get all the premiums allocated taken up. In every county there are inferior bears at service, and they should be replaced by good animals. There is money and machinery for the purpose, and they are not always availed of. This is due in some instances to lack of organisation on the part of the County Committees. The County Secretary is the responsible official.

The following table shows the total number of premiums granted in each county in Ireland in 1914, the amount allocated for the purpose by each Committee, and the actual expenditure, with an estimate of the number of sows served:—

County.	Total Number of Premiums granted.	Total Expen- diture.	Amount Allo- cated for Premi- ums.	Number of Sows served, esti- mated.
	£	£	£	
Antrim ..	13	53	60	450
Armagh ..	8	32	40	290
Carlow ..	4	14	22	150
Cavan ..	24	98	100	350
Clare ..	10	42	50	340
Cork ..	38	160	200	1,200
Down ..	10	44	50	330
Dublin ..	18	89	90	550
Dublin ..	3	13	13	100
Fermanagh ..	8	34	38	270
Galway ..	28	118	120	950
Kerry ..	23	99	115	770
Kildare ..	5	26	50	290
Kilkenny ..	14	60	60	470
King's ..	15	68	65	500
Lancaster ..	3	15	25	90
Limerick ..	10	42	60	560
Londonderry ..	11	49	55	380
Longford ..	12	50	55	410
Louth ..	6	24	30	210
Mayo ..	27	118	125	390
Meath ..	4	18	25	150
Monaghan ..	17	67	75	600
Queen's ..	13	55	55	440
Roscommon ..	19	77	75	650
Sligo ..	9	39	40	310
Tipperary ..	10	42	61	340
(N.R.) ..	11	49	59	380
Tyrone ..	14	60	60	470
Waterford ..	5	30	35	180
Westmeath ..	8	34	39	270
Wexford ..	28	96	97	750
Wicklow ..	6	22	24	140
Totals ..	431	1,825	2,096	14,500

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Mr. D. Tawney—continued.

The operations of the County Committees under this scheme are each year supplemented by the Department in the Conquested Districts. The location of boars is arranged and the premiums paid entirely out of the Department's funds. The conditions on which these premiums are granted are identical with those of the County premiums. The particulars are—

County.	Total Number of Premiums.	Estimated Expenditure.	Estimated Number of Sows.
Clare ..	3	34	270
Cork ..	10	44	330
Donegal ..	14	70	520
Galway ..	29	127	960
Kerry ..	12	50	410
Leitrim ..	6	26	390
Mayo ..	20	116	950
Roscommon ..	11	45	390
Sligo ..	12	52	490
Totals ..	132	553	4,450

The County Committee selects the applicants; and the Inspector does so in the Conquested District, having due regard to the places where county boars are placed.

Mr. O'Mara.—The County authorities should certainly take more energetic measures.

Mr. Tawney agreed. There are bad pigs in portions of certain counties, yet the Inspectors find great difficulty in locating premium boars there; the influence of public men would be of assistance.

As an adjunct to the premium boar scheme the Department encourage as far as possible the sale to farmers for breeding purposes of the surplus good young sows from their Agricultural Stations and College farms. The following table shows the numbers sold from the farms which mainly supply applicants in the southern counties:—

	1910.	1911.	1912.	1913.	1914.
Albert College, Farm, Glasnevin ..	43	66	40	31	48
Munster Institute, Cork	13	14	6	24	20
Cleanability Agricultural Station ..	17	27	13	19	12
Totals ..	93	107	59	65	80

The restrictions affected the number sent from Glasnevin in some of the later years; but there have been demands for twice the number that could be supplied.

The figures for 1914 are in respect of sales up to 1st November only. Similar distribution of good stock takes place from the Department's farms in the north and west. It may be mentioned that the female progeny of these sows are much sought after in the various districts and several are, when they become available, purchased by neighbours to replace inferior brood sows.

With the object of improving the existing pure breed herds in Ireland and also for the purpose of introducing new blood, the Department have from time to time imported high class boars and sows from the best herds in England. The following figures indicate the extent of the purchases in recent years:—

	Boars.	Sows.
1909-10 ..	15	8
1911-12 ..	3	1
1912-13 ..	2	5
1913-14 ..	20	14

These animals are not sent out to farmers, but are used as stock animals in pure herds, and their progeny is distributed as previously shown. It would, be thought, be generally admitted that as a result of the

Mr. D. Tawney—continued.

various influences at work the quality of the pigs in Ireland had improved considerably in recent years, but it is a matter for regret that the total output has not increased proportionately or has not been as steady as one would desire. To suggest remedies which would bring about a general improvement in the supply is a difficult matter owing to the complex nature of the problem, bearing as it does on foreign trade relations and other wide economic questions.

Mr. Bern.—What foreign trade relations?

Mr. Tawney.—Imports from abroad which very much from time to time.

The following suggestions are offered for the consideration of the Committee:—

1. That the owners should if possible take steps to ensure that prices do not fluctuate widely from week to week and that extremes should as far as practicable be avoided. Low prices compel farmers to reduce their brood stock, and abnormally high prices have the effect of inducing individuals who cannot be depended on for a supply at ordinary times to engage in pig raising in a spasmodic manner to the detriment of the trade generally and the interests of those engaged in it constantly in particular.

2. That farmers should study more closely the requirements of the market, endeavour to produce the class of pork required for the best markets, and maintain a steady output of finished pigs.

3. That steps should be taken to co-ordinate the live stock improvement schemes of the various County Committees and the Bacon Curers' Association. In order to avoid overlapping the Committees and the Association should exchange lists showing the names and addresses of persons with whom boars are located each year. Efforts could then be made by one body or the other to place boars in districts which are not already served in that respect.

Mr. O'Mara suggested that the Bacon Curers' Association should be given a rough map of where the county boars are placed.

Mr. Tawney replied that this was impracticable except on a very large scale map. Such a map was prepared, but it was a very large one. Each County Secretary could tell the names of persons who had premiums. Most of the Committees have such a map already for their respective counties.

4. Legislation on the subject of compulsory registration of all boars standing at service in Ireland should be considered. Some of the bad boars do a great deal of harm.

It is difficult to get boars into some districts as the people are prejudiced against any sort of pure breeds.

5. That farmers should be encouraged to grow more extensively barley for feeding purposes as a means of minimising the loss consequent on increased cost of production at times when the prices of imported food become excessively high. The increased cost of production owing to a rise in prices of imported foods was not so serious as people imagined; home-grown feeding would, however, steady the cost.

He submitted the following table showing average price per cwt. of green bacon in London monthly as returned in the monthly Journal of the English Board of Agriculture. He did not, however, accept any responsibility for this.

	1912.		1913.		1914.	
	1st quality	2nd quality	1st quality	2nd quality	1st quality	2nd quality
January ..	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
February ..	59 0	56 0	71 0	69 0	76 0	73 0
March ..	60 0	57 0	77 0	74 0	79 0	76 0
April ..	65 6	62 6	77 6	74 6	79 6	76 6
May ..	68 0	64 0	79 0	76 0	81 0	77 0
June ..	70 0	65 0	79 0	76 0	79 0	75 0
July ..	88 0	83 0	86 0	82 0	80 0	76 0
August ..	77 0	74 0	84 0	81 0	77 0	74 0
September ..	77 0	73 0	85 0	84 0	76 0	70 0
October ..	62 0	58 0	87 0	84 0	82 0	87 0
November ..	79 0	75 0	82 0	80 0	80 0	85 0
December ..	79 0	77 0	81 0	76 0	—	—
	72 0	70 0	75 0	71 0	—	—

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Mr. D. Twomey—continued.

Mr. Jerome Hurley—continued.

This table confirmed his statement that there were variations on the other side.

Mr. GORDON.—The contention is that when pork is paying well it would be advisable for curers to hold back a little, and when prices drop to give a little more for the pork than it is worth.

Mr. O'MARA.—That would require a trust. It could not be done without a combination, which there never would be. It would also be a dangerous policy for the farmer. When bags are scarce everyone wants their quantity. It is impossible to have a uniform price for pigs, except the Irish curers were the sole factors.

Mr. WINTERROW.—It would meet the situation if farmers could be induced to equalize the number of pigs. The shortage in early summer is made up in the other months.

Mr. TWOMEY.—The supply is in the hands of a very large number of people, and nothing could be done with them. When coming to the merchants one was dealing with a smaller number. He wished to refer to the question of grading. He did not object to it, but he thought the curers' grading was not uniform. There are different grades in May and July, and they are changed very often. Mr. SUMNER stated it was possible to make first class bacon out of pigs under 150 lb., yet top price is not always paid for pigs of that weight.

Mr. O'MARA.—The farmer will never understand this. There are about eight selections in American bacon, each of which fetches its own price and has its own market. In this way there are markets for every class of bacon in England; London is the principal, and in the north, Manchester and Liverpool. In the summer as much can be made for stout bacon in the north as for the lean in London. Therefore the rate in London are never so much.

Mr. BORN stated that the same thing applied in the north in a different way. The market the pork is going to has to be taken into consideration.

Mr. O'MARA.—A lot of 7½ would be a large sum for a matter of 6 lb., but the line had to be drawn somewhere. He agreed that whether pigs are dear or cheap there was no variation in the price of the offal and the difference must come out of the bacon.

Mr. TWOMEY mentioned that a complaint made to him was that when prices dropped in London they came down in this country immediately. When they rose in England they only crept up slowly here.

Mr. O'MARA.—Mr. SUMNER answered that. The curers never exchange views on that point; they work absolutely independent of one another.

#### Mr. JEROME HURLEY, Clonsilla.

Stated he was a farmer in a small way, and fed pigs; he was also an agent for Messrs. Shaw for sending pigs from Clonsilla.

He found difficulty in pointing to any particular cause to account for the reduction in Irish pigs, but he thought the reason might be looked for in (1) scarcity of labour, (2) fluctuations in prices of pork and feeding stuffs, and (3) want of knowledge and understanding in the feeding and management of pigs. Farmers consider that labour in connection with pig feeding is extensive. He did not, however, say that was the case in Clonsilla, where, so far as he could see, there was no reduction. He believed, however, there would be more kept but for this factor. The farmer with 100 acres does not like to get into too many pigs because they may labour is dear and they cannot get it, and that that it is troublesome. Both male and female servants are reluctant to do the work. He did not himself find any difficulty, but thought a lot of the scarcity was due to the amount of food that required to be killed for pigs. He fed up to 300 together; he kept but three men, one of whom was always carting.

The usual size of farms in his district was about 25 to 30 acres, but it varied. He would not say that the daughters of small farmers refuse to feed pigs; the families of many small farmers work as hard as they can. One man may want labour, the other may be

all right. The scarcity of labour does not affect the smaller farmer. If the housing and feeding was better understood the labour is not so much. What is most needed is a better knowledge of the management of pigs generally. Labour could be saved if good drainages were provided, good floors put in, and by raising the houses well above the ground level so that they could be kept clean; better ventilation, etc. He always used concrete floors. In the winter he laid old railway sleepers at the head of the sty on which the pigs could lie; in summer he did not find that bedding was any use, as the pigs did not lie on it.

When persons who do not understand go in for pig feeding they are often disappointed and give it up. He had a pretty good opportunity of knowing how mistakes were made. In his own district milk is scarce; many small farmers with four or five cows give the separated milk to young stock. Where it is not available people are liable to give too much Indian meal, and if there is no milk Indian meal is dangerous and pigs won't do on it alone, even with a small proportion of tallings or pollard. Barley meal or oats is all right, but the labourer is inclined when potatoes run short to put the pigs entirely on Indian meal, with the result that it becomes unwholesome, though a pig nearly finished can take more Indian meal.

He bought his pigs at from three months old upwards. They are bought during March and April and fed during the summer for about three months. He fed according to the price of stuff. Last year crushed oats was cheap so was also foreign barley. Crushed oats and Indian meal even without milk is a good mixture, but he did not continue this feeding long enough to know whether it would pay. Barley would do alone. He gave more tallings than Indian meal for the straw; for the best month they could get all Indian meal. The pollard is called the bran, and known as middlings or thirds. For 300 pigs he would get upwards of 250 gallons of separated milk per day.

Feeding can be done more rapidly when milk is used, but it can be overdone on young pigs, as it causes scouring; the pig will drink a lot too much milk when dry food is given. About 1d. a gallon is paid for separated milk in Clonsilla. The people there are usually good pig feeders. It is a scabby place and they have little milk. There is no fish given to the pigs.

He would be glad to find out whether pigs could be fed profitably without milk. He was aware of the experiments at Clonsilla. The first was for the purpose of ascertaining whether separated milk could be more profitably given to calves or pigs. They found it more profitable to feed to pigs. They made some more experiments on the value of cooked and uncooked food. He thought the result was in favour of raw food. Particular attention was not, however, paid to the actual value of a particular food. The tendency of the small farmer was to fall back on Indian meal. When pigs were unthrifty and had he invariably found that it was due to too much Indian meal.

He would suggest carrying out experiments in the feeding of pigs on different foods. In the earlier Clonsilla experiments it was shown that some of the pigs kept without milk were fed at a loss; but too much dependence was placed on Indian meal, and it formed too large a proportion of the total ration. If barley and pollard had been used possibly the results would have been different, and this experiment would be worth trying. He himself was acquainted with these experiments, but he questioned whether this was general, and the difficulty was to bring such results home to the small farmer.

He could not make any practical suggestion as to the means by which the results of the experiments at Clonsilla could be brought home to the public. He believed the Department must have made efforts in this direction, but they had failed. The agricultural instructor does not pay enough attention to pigs; he tells the farmer about manure, crops, etc., but not about pigs. From the educational point of view the Department should devote more attention to pigs; the instructor should always ask the farmer about them and he should have a practical knowledge of pig feeding.

CORK, 1864 November, 1914.

Mr. Jerome Hurley—continued.

Mr. Jerome Hurley—continued.

A labourer buys pigs now and feeds with potatoes and milk and perhaps some bran, and goes on all night. He buys in another lot in January or February and his potatoes run out; he then purchases meal, and is surprised to find that his pigs are not thriving.

As the prices of pigs. There will always be fluctuations in everything, and these, of course, influence the farmer. When there is a combination of the low price of pork and feeding stuffs are high the farmer will get out of pigs altogether.

The fluctuations from market to market look a lot more than they really are. If butter falls 4d. lb. from one market day to another there is not much talk about it, but if pork falls an equivalent amount, or 5/- per cwt., farmers say they won't fatten any more. These things will happen, and he was sure the bacon cures could not help it.

A good crop of potatoes would induce labourers and small farmers to buy young pigs to consume them, pieces of bonehams would be raised, and people would be tempted to keep sows. A previous witness stated that the industry paid him in 1912 when prices of bonehams were low and feeding stuffs dear, but it did not pay him well the next year when the conditions were reversed. That was true according to his experience. The price of pigs that year (1912) was low in April and May; meal in West Cork would then be 48 lbs. and pork about 52/- or 53/-. He bought them 2/- or 3/- under the price of live-weight pigs. The Foot and Mouth restrictions came on and the ports were closed; something had to be sold and the sows were disposed of, especially as bonehams were cheap. Consequently there was a decline next year.

He was feeding pigs for nine or ten years. He commenced fairly small, and had got out of them lately, though they paid him all the time. His experience was that mixed feeding is preferable. The reason that many farmers and labourers get out of pigs was that they were disappointed, but their results were due to working on wrong lines. If there was more tillage and if farmers were told how to utilize their crops for the feeding of pigs there would be more of them kept.

He had tried a little mixed meal, but not enough to know the effect. He had also tried trade, in fact he had tried everything. Barley meal, tailings, and Indian meal were probably the most reliable. He used small quantities of treacle only, and he did not think the pigs liked it. The cures look upon a treacle-fed pig as making bad bacon.

His own system paid all right, but in 1913 when he got a high price for the bacon pigs it did not pay so much as it looked, because the price of young sows was high. Animals that weighed only about 58 lb. cost him 35/- in Clonsilla. It paid the breeder well, however. He would agree with the evidence given to the effect that 5 cwt. of feeding gave a cwt. live weight; there is nothing wrong, however, about it. He knew that the experiments at Clonsilla were carefully carried out and that the results could be relied upon. The practical man would not be in the same position to ascertain the results. He himself had to feed a pig for four or five weeks to bring it up to the selling price, and only then could he get a profit.

The meals are fed raw, sometimes not even soaked, simply with milk or cold water. Perhaps he might have done better if he had steeped the meal for a time. He never tried cooked food, as he could never boil for the number of pigs he had. They did well with him on raw food, and he did not believe that any difference in quality could be detected.

Some people would give up to a gallon of milk a day; he did not take notice of the quantity himself. He never had any potatoes to speak of, but he gave the pigs grass, clover and raw mangels. Barley was one of the meals that could be given without any admixture. He did not agree that it was inclined to give skin disease. When anything went wrong with his pigs the only thing he gave them was barley; he used it to counteract scouring. It was possible that more pork could be made out of Indian meal, but the barley is the best all round feeding.

Three months old pigs, about 70 lbs., now cost about 27/- or 28/-. There is no doubt that the fluctuations in price made many people disgusted with the whole business. The farmer does not understand why it should happen. If he could be advanced on this point and informed as to what prices might be, it would do away with a lot of the disappointed.

He was quite satisfied with the breed of pigs. When the farmer did not get good results it was usually due to wrong treatment. It would take generally about three months to raise a pig from three months old to 1½ or 1¾ cwt., provided it had a good place. Up to this he had fed pigs summer and winter, but had not done so this winter. He had pigs up to the time of the war; meal went up then and pigs fell; a new situation, which he could not understand, arose, and he got out of the whole lot.

The farmer knows the prevailing prices all right. When they are low he should be told the reason, and also when they are likely to go up. The farmer should also be informed of the probable prices of feeding stuffs. But he must have reliable information. He realized, of course, that it was difficult for a Government Department to supply this information, but if the bacon cures and the Department co-operated something could be done.

There are two reasons why pig feeding in winter cannot pay very well. Sows from July onwards will be dear because the potato feeder is buying, and they come into a bad market about Christmas. The farmer should be told there is usually a glut about Christmas, and things of this sort. He himself believed that pigs do not thrive so well in winter.

He would say that as a rule the labourers in Clonsilla keep pigs, probably as many as in the past. About two would be the general average for a labourer. The Rural District Council do not put up pig houses in connection with their cottages; the labourers themselves do so, but these are usually unsuitable and without any ventilation, so that the animal cannot thrive. He did not know whether the labourer could keep a sow, but he should be induced to keep a couple of pigs. The keeping of poultry might to some extent take the place of pig feeding, but if properly treated the pig would pay better.

The statement that labourers were not tilling their plots did not apply to his district generally. The plots would be tilled for potatoes only, but they think they can buy these cheaper than they can raise them. They also grow oats and barley, and some of them flax. Occasionally there are half acres not tilled, but they are the exception.

Mr. D. O'CONNOR, Captain Abley, Mallow, appointed by the Cork County Committee.

The shrinkage of pigs in Ireland was attributable to the great and sudden changes in the prices of bacon, which he believed to be unreasonable and against fair trading, and they militate against the feeder. He would not make this statement were it not that he understood the bacon cures were represented on the Committee.

In 1911 pork varied to the extent of £1. On, he thought, 25th July, 1911, he sold pigs 1.2.5 in Limerick at 60/-; that day twelve months he sold pigs to the bacon cures at 40/-. This had all to do with the shrinkage in the number. They cannot be fattened if they are not reared; the prospect of a reasonable price was the first outlook for the rearer.

The three main reasons why pig feeding is not carried on so extensively as formerly are the high price of feeding stuffs, the great variation in the prices of pork, and the shortage of labour. In his district the farms are large and the holders are dependent on servants to feed pigs. The position of the domestic servant is now noticeably improved, and she will not feed pigs; he thought just so. The difficulty had to some extent been met by the adoption of a previous witness's (Mr. Hurley) policy, which was that men servants can feed as economically and that they do it much better; but this is awkward for the farmer feeding in a small way. A farmer cannot be expected to employ a man to feed a small number of pigs.

COKE, 16th November, 1914.

Mr. D. O'Connor—continued.

These things could, however, be got over if a reasonable and uniform price were maintained, so that the necessary provision could be made. It is now a speculation.

The bacon curers' system of cutting for under and over weight may be all right, but in his opinion it was unfair. They adopt no regular practice and have no sympathy with the people.

He agreed with the argument that the bacon curers could not exist if pigs were not produced in the country and that they would be killing their own business.

Farmers unfortunately did not see the matter in this light. He admitted that it is definitely understood by everyone interested that pigs weighing from 14 to 16 cwt. command the best price, and that unsuitable pigs would not command a good price.

During the past two years when the restrictions were in force the curers gave very low prices for the heavier pigs.

He considered that the curers had completely done away with the shipping trade, which was a fine industry twenty years ago.

One week it may be known that a certain weight will be in demand. Next week there will be no standard. It varies at different times. If there is no shipping trade the curers cut the price enormously for heavy weights or over 2 lb. over the proper weight. He had been cut 4/- where a pig weighed but 2 lb. over. In another instance he was cut 7/- per cwt. for 2 lb.

It was obvious that all those engaged in the pig trade were servants of the curers. This was a free country and he did not think they had lost their minds. He referred to the matter purely with a view of having the system changed.

He thought that statistics would prove that the pigs formerly shipped to England now go to the Irish curers. Practically no pigs had been shipped from the south of Ireland except sows and heavy overweights.

He would say that the changes in the price of pork were unneeded. He had, of course, to assume that if the market the curers have to meet fluctuates to the extent indicated the price of the pigs they buy must also fluctuate. The pig owner cannot see this. Farmers cannot believe that the prices fluctuate so much. Whilst it might be put to the credit of the curers that they had given prices which prevented the man buying for shipment competing with them, he would say that it was because the competition had been done away with.

The curers would regard any man shipping live pigs as a blockhead and he would be practically hounded down. The industry is confined to the representatives of the curers; no one else has an opportunity of competing. Unless the refuse, no pigs are shipped from Cork and Waterford. The curers allow these to be shipped because they don't want them.

The County Limerick people maintain that the curers have blocked the live shipping trade, that they crushed out the competition by putting men out of the trade by competing until they were not able to make any money.

He did not think a man would be hindered in sending his pigs to Birmingham. The belief is that when people who are in the pig trade get out with the curers they cannot get in again.

The number of pigs fattened in Ireland is affected by (a) potatoes, which encourages pig feeding; (b) Indian meal at a reasonable price has a like effect; current prices are not reasonable and pigs are this year fattened at a loss. The crop of potatoes would influence the poor man in keeping pigs. The number of pigs will not be increased by a sudden rise in the price of pork, the only way to maintain the number is to have the price as uniform as possible and keep within commensurate fluctuations. Any business that is not paying bankrupts itself. He assumed that some of the drawbacks he had referred to were in existence previous to 1913-14, but he maintained that

Mr. D. O'Connor—continued.

the fluctuations were not so great as they had been during the past four or five years. The feeder who is badly hit a few times is not easily brought back to the industry. Owing to fluctuations in the price of pigs he now breeds his sows.

The Large White York is liked in the south, but not the extra large type. A nice uniform pig, deep, medium head, nice soft good hair—that is the favourite.

He considered that the Large York was much superior to the Ulster, but he had no personal experience of the latter. He thought the Department had done a good deal for the industry in his part of the country; a good useful standard is now more generally kept. This is to the advantage both of the breeder and curer. That should be realised by the curers; and they ought to do more for the industry.

As regards the steps to be taken to secure an increased production he would suggest a more uniform price throughout the year and a better system of buying. In view of the circumstances placed before him to-day he agreed that the price was largely regulated by supply and demand, and that it would be difficult to avoid fluctuations over a long period, but he would emphasise that these fluctuations have a serious effect on pig breeding. He believed that pork when used was worth precisely as much to-day as it would be next January; and while pigs were plentiful it was taking an advantage to buy at a low price.

Anything that could be done to remove the position of the farmer should be done. He did not believe houses to be sound policy, but he should like every possible form of inducement offered to meet the present emergency. This year had been a total failure because every man who fed pigs did so at a loss. He had got 61/- a cwt. for pigs, but lost 10/- each on 24 of them. He bred the pigs. He put 30/- each on the sows at 134 weeks old, and the first profit was all right. At 184 weeks, on 1st June, they weighed 82 lbs. apiece. He fed on Indian meal, polished, barley meal, milk, all ground in his own mill, and the pigs did well. He kept a record of the meal used. When he paid the bill he was 9/- to 10/- short. Meal cost 19/- a sack, polished 1/- a stone, barley meal was charged at the same price, and separated milk at 1d. a gallon, and nothing was included for the labour. They weighed 13.5 when killed after being fed for two months and twelve days, so that they were practically six months old. He did not analyse his figures to ascertain the return of pork from a given quantity of meal.

He had carried out the experiment under the direction of the Agricultural Instructor, and the County Committee had the figures. They were put in as practically the price for which they could be sold. They were valued at the market price.

What the ordinary person paid for the bacon did not vary in the same way as the curers varied the price of pigs. He assumed that the shopkeeper sells as he buys.

He agreed that there are fluctuations in the price of every agricultural produce, and the man who keeps steadily on reaps the profit. What was wanting in the pig trade, however, was a fairly medium price that would leave something to look forward to. If there was a more uniform price there would be more stability.

He had looked at the killings in Denmark and in Ireland, and if the price of pork here was influenced accordingly that would, of course, be an argument in favour of the curers. He believed it would be in the interest of the industry in Ireland if there were co-operative bacon curing associations, not necessarily in large numbers; it would give encouragement to the public.

From what he had heard to-day, however, he now recognised that where in this country the co-operative principle has been tried, and with fair capital, they had not, in competing with well-established bacon curers, been able to make money or to give better prices for pork.

CORK, 16th November, 1914.

Mr. D. O'Connor—continued.

He might say that in the town of Charleville, where they were in competition with the Limerick people, the merchants paid more than in any fair where there was no competition. This showed they did not treat every district uniformly, and was attributable to want of competition. In his district all the pigs were sent to the stores and sold by weight, and this was the very best way to do.

He thought the sanitary authorities were a little too severe on the poor man's pig. Commensurate should

Mr. D. O'Connor—continued.

prevail where no danger to the public existed. The people did not like to get into trouble, and consequently often avoided keeping pigs. The labourer is not prevented from keeping a pig, provided it is at a certain distance from the house. The local authorities can make their own regulations, but these are severe. He was referring to the urban and rural districts of Mallick. He agreed that it was a mistake not to supply pig houses with the labourer's cottages; it should be one of the first buildings.

## SECOND PUBLIC SITTING.

TUESDAY, 17TH NOVEMBER, 1914.

AT 10 O'CLOCK, A.M.

At the Courthouse, Cork.

## PRESENT:

Mr. JAMES S. GORDON, B.Sc. (Chairman).  
Mr. R. M. BERN.  
Mr. STEPHEN O'MARA.

Mr. PATRICK CLUNE.  
Mr. J. WILLINGTON, J.P.  
Mr. O. W. H. ROYSTON, B.A.

Mr. J. M. ADAMS, Principal, Agricultural Station, Clonsilla.

Mr. Adams submitted particulars regarding the five completed experiments in the feeding of pigs which up to the present had been carried out on the Station farm at Clonsilla.

## EXPERIMENT No. I.

Test of the Feeding Value of different Meals, viz., Barley, Pollard, and a mixture of Wheat, Barley, and Oats (all Home-grown foods) against Maize (a largely fed Imported Food).

Five pigs were included in each lot, and the experiment lasted from the end of July till the middle of

November, or 160 days in all. In addition to the meals being tested, the pigs were given an adequate ration of milk and potatoes. Table A. shows the quantity of each of these foods consumed, and Table B. the weights of the different lots at the beginning and conclusion of the experiment.

TABLE A.

## FOOD CONSUMED.

	Maize.	Barley.	Pollard.	Wheat.	Oats.	Milk.	Potatoes.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Lot I. ..	1,402½	—	—	—	—	2,430	2,587½
Lot II. ..	—	1,402½	—	—	—	2,430	2,587½
Lot III. ..	—	—	1,402½	—	—	2,430	2,587½
Lot IV. ..	—	845½	—	845½	110	2,430	2,587½

TABLE B.

## WEIGHTS AT BEGINNING AND CONCLUSION OF EXPERIMENT.

				8 PIGS IN EACH LOT.			
				(Start). Live Weight. 29th July, 1911.	(End). Fostered Live Weight. 19th Nov., 1911.		
				cts. qrs. lbs.	cts. qrs. lbs.	cts. qrs. lbs.	cts. qrs. lbs.
Lot I. ..	"Maize"	..	..	2 1 25	8 1 13	..	..
Lot II. ..	"Barley"	..	..	2 1 23	8 0 13	..	..
Lot III. ..	"Pollard"	..	..	2 1 24	7 3 27	..	..
Lot IV. ..	"Wheat"	..	..	2 1 24	8 1 10	..	..
	"Barley"	..	..				
	"Oats"	..	..				



COKE, 27th November, 1914.

Mr. J. M. Adams—continued.

Mr. J. M. Adams—continued.

The net daily gain (live weights) made by the five lots worked out as follows:—

	Rs.
Maize fed pigs, ... ..	1.24
Barley do. ... ..	1.19
Potatoes do. ... ..	1.13
Mixed Home-grown Meals, ... ..	1.24

The daily gain obtained was rather low, but this he attributed to the fact that the feeding period was not entirely in the summer months. The experiments carried out by the County Agricultural Instructors were on the same lines as that he had detailed, and the results of these, which are published in the quarterly *Journal of the Department*, Vol. XIV., No. 3, correspond closely. Out of a total of 52 pigs fed on maize and a similar number on barley, the former gave a daily return of 1.40 lbs. and the latter of 1.45.

He found that owners do not pay any higher prices for better quality in the finished pork, and consequently the farmer has no inducement to feed on any but the cheapest meal or the meal which will give the largest return for its consumption. The owners who were asked to report on the quality of the pork in the lots fed in the County experiments decided that the barley fed pigs were superior, though no higher price was given for them on this account.

## EXPERIMENT No. II.

The amount of Meal or its equivalent required to put on one lb. increase live weight

The results of experiments with 150 pigs fed both in summer and winter showed that the average amount of meal necessary was 4.18 lbs., the range being from 3.20 lbs. to 5.24 lbs. These results further showed that a greater increase for the amount of food given is obtained in the summer than in the winter months. With 98 pigs fed from April to October 3.91 lbs. of meal put on one lb. increase, whereas in 40 pigs fed from November to March 4.23 lbs. were required; that is, one cwt. of meal produced 281 lbs. live weight increase in the summer fed lot as against 254 lbs. in the winter fed lot. The conclusion from this is that when pork is selling at 56/- per cwt., meal is worth fed. per cwt. more for fattening pigs in summer than in winter.

## EXPERIMENT No. III.

Determination of the Meal Value of Potatoes or the Meal Equivalent of Potatoes.

This experiment was suggested by the well-known series of experiments carried out at Copenhagen for the information of Danish feeders. The results there showed that 4 lbs. of potatoes had the same feeding value as one lb. of mixed meal, and the object of the experiment at Clonsilla was to test how far this was true in Irish pig feeding. For the purposes of the experiment, two lots consisting of 21 pigs in each were selected and fed on the following rations:—

- Lot I. 1 Part by weight meal,  
4 Parts " potatoes  
6 Parts " separated milk.
- Lot II. 2 Parts by weight meal,  
6 " " separated milk.

In the rations given to the second lot, one part of meal was substituted for four parts of potatoes, and as a proof of this proportional equality in feeding value, the daily gains made were almost identical, that from the first lot being 1.81 lbs. (live weight) and from the second 1.85 lbs., or a meal equivalent per lb. increase of 3.8 lbs. and 5.9 lbs. respectively.

The results obtained by the Agricultural Instructors in the County Committee experiments with 74 pigs fed on each ration showed a similar correspondence in feeding value, the daily gains returned being 1.50 and 1.54 lbs.

A conclusion to be drawn from this experiment was that if the feeding value of potatoes was one-fourth that of meal, the market value of potatoes for feeding was also one-fourth that of meal; in other words, if meal were costing 48 per ton, potatoes would be worth 12 per ton for pig feeding. When ordinary potatoes could be sold for more than quarter the current price of meal it would be more profitable to dispose of them and purchase meal for pig feeding.

He had tried no experiments with feeding potatoes alone, but he had tested raw potatoes and raw meal against boiled potatoes and boiled meal. He found that he had equally good results from the former method of feeding, though he considered it advisable that potatoes when fed raw should be very finely pulped or grated. He was satisfied that pigs could be successfully fed without potatoes. Grouping the results of all the experiments at Clonsilla he found that 50 pigs which received potatoes as part of their ration made a daily gain of 1.5 lb., while 47 pigs which were fattened without receiving any potatoes gave a daily gain of 1.5 lb.

## EXPERIMENT No. IV.

The Value of Separated Milk for Pig Feeding.

This experiment was designed on almost the same lines as Experiment No. II., and its object was to determine the meal equivalent of milk. Theoretically the value of separated milk, calculated on the number of digestible feeding units it contains, is one-fourth that of potatoes and one-sixth that of a mixed meal (equal parts of barley and maize), the number of feeding units in each being—milk, 14.7, potatoes, 31.6, and mixed meal, 80. On this basis two lots of 21 pigs were fed on two rations composed thus:—

- Lot I.—1 part meal, 4 parts potatoes, 5 parts milk.  
Lot II.—2 parts meal, 4 parts potatoes.

In the latter case 1 lb. of meal replaced 6 lbs. of milk, otherwise the rations, so far as the number of feeding units they contained, were the same. According to the results, Lot I. increased 1 lb. for each 3.93 lbs. meal equivalent given, whereas in the case of Lot II. it required 5 lbs. of meal equivalent to produce a similar gain in weight. This pointed to the conclusion that separated milk was worth almost one-third more than its feeding value for pigs owing to the greater weight which it causes the accompanying food to be consumed.

In this experiment both sound and diseased potatoes were fed; in the corresponding experiments carried out by the County Agricultural Committee only sound potatoes were fed. The results of the latter corroborated those obtained at Clonsilla. Valuing meal at 7/- per cwt. and separated milk at 1d. per gallon, he estimated one cwt. live weight of pork, when separated milk formed part of the ration, could be produced for 27/-; if no milk were fed, the cost of production would be 35/-.

For the amount of food consumed he found a larger increase of weight is obtained in the early stages of fattening. The younger the pig the less food is required to produce one lb. increase in live weight.

The possibility of a loss in feeding depended partly on the price paid for butchers and partly on the cost of the meal, etc., fed. He submitted particulars showing the profits on the fattening of 10 pigs from June to August last:—

Price received for pigs at 68/- per cwt., 441 lbs. 5s.

Price of Butchers, ...	437 10 0
Cost of meal, 7/8 per cwt., ...	15 18 0
Attendance, etc., ...	2 16 3
Total cost, ...	234 4 3
Profit, ...	47 14 6

CORK, 17th November, 1934.

Mr. J. H. Adams—continued.

These pigs made a gain of 1.3 lb. daily and returned 2,754. per gallon for the 782 gallons of separated milk fed to them. He did not believe the same milk if fed to calves would give anything like an equal return. In the above experiment, if pork had fallen to 55/- per cwt. the pigs would have returned 1d. per gallon for the separated milk consumed, and with milk valued on this basis would have returned a profit of £4 9s. 4d.

## EXPERIMENT No. V.

## Raw v. Cooked Meal.

The results of this experiment, a preliminary report of which was published in the *Quarterly Journal* of the Department, Vol. XIII., No. 2, p. 340, showed that the average daily gain made by 22 pigs was:—

Meal Cooked, ... ..	1.35 lbs.
Meal Raw (steeped in cold water 1 to 12 hours), ... ..	1.46 "

Further in order to investigate a complaint made by the Cork bacon curers that pigs fed on raw meal gave inferior pork, a number of pigs fed on raw and cooked food were sent by arrangement with Messrs. Denny and Lambson to the factories of those firms for examination. Private marks were put on both lots of pigs, and the curers failed to distinguish the pigs fed differently; as a matter of fact, a slight expression of preference was given to some of those fed on raw meal. Obviously there could be no objection urged on this account to the use of raw meal for pig feeding.

Arising out of this experiment he might state the following results which showed the difference in feeding these foods in summer and in winter.

In summer 14 pigs fed on raw meal made 1.47 lbs. daily gain, while the same number fed on cooked meal made 1.41 lbs. daily gain. In winter 12 pigs fed on raw meal made 1.43 lbs. daily gain, and 12 pigs fed on cooked meal made 1.52 lbs. daily gain.

He attributed this to the fact that a pig fed in winter on cooked food had to consume more water than it required and had to get rid of excess water.

The different breeds of pigs as pork producers kept on the school farm at Glenskillity were:—

Pedigree Large York.

Pedigree Large Black.

Large York boars on local Large York type sows.

Large York boars on pedigree Large Black sows.

Mixed breeds Large York type.

Large Ulster boar on local sows.

His opinion was that a most useful bacon pig was got by crossing a Large York boar on local sows. The majority of pigs bred in Cork are of this type. These sows are good nurses, and the progeny are quick growers, and produce a rather lean deep-sided pig, 1½ cwt. dead weight, at 5 to 7 months old.

Pedigree Large York makes an excellent bacon pig; easy to keep, but sows are occasionally poor nurses.

Large Black sows are good nurses; crossed with Large York boars they give a good bacon pig, rather lean when finished, much liked locally.

⊙ Mixed breeds are generally useful pigs; are largely Large York blood, occasionally cross in bone and mature slowly.

Large Ulster boars on local sows produce thrifty pigs, mature early, but at light weights, very fat over back and have short thin sides.

Mr. J. H. Adams—continued.

Cost of raising a given weight of pork.

Pig rearing falls into two periods:—

1. Rearing—Approximately 12 weeks.
2. Fattening—13 weeks or longer.

## 1. Cost of rearing a boarham:

This is (a) the cost of keeping a sow for six months, divided by average number of boarhams reared every six months, viz., 3, plus (b) cost of food supplied boarham, plus (c) allowance for attendance, etc.:—

(a) Cost of keeping a sow for 6 months, including services fee, etc.	
Carrying boarham 4 months, at 3d. per day, ... ..	£1 15 0
Nursing boarham 2 months, at 6d. per day, ... ..	1 10 0
	<hr/>
	28 0 0

Cost for 1 boarham = ¼ lb., or ... 0 10 0

## (b) Food supplied to boarham.

1st 4 weeks—None.

2nd 4 weeks—

1½ lbs. tailings daily = 42 lbs. at 3d. = 3/0; 12 gallons separated milk at 1d. = 1/7, ... 0 4 6

3rd 4 weeks—

2½ lbs. tailings and meal daily = 70 lbs. at 1d. = 4/4; 16 gallons separated milk at 1d. = 1/4, ... 0 5 8

(c) Watching at night, attendance, etc., 1d. per day for 84 days, ... 0 3 6

Total cost of rearing, ... .. £1 3 8

Average live weight of boarham 12 weeks old = 70 lbs.

Cost of raising a boarham = 38/- per cwt. live weight.

## 2. Cost of fattening.

Depends on:—

- (a) Quantity of food required to produce a given increase in live weight.
  - (b) Time required to produce a given increase in live weight.
  - (c) Cost of food required to produce a given increase in live weight.
  - (d) Cost of food preparation, etc.
- (a) Quantity of food to produce a 1 lb. increase live weight average of 155 pigs:—

(Assuming that potatoes are one-fourth and separated milk one-sixth value of meal.)

Meal equivalents required = 4.15 lbs.

Or to produce 1 cwt live weight 421 lbs. meal equivalents are required.

CORK, 27th November, 1914.

Mr. J. M. Adams—continued.

Mr. J. M. Adams—continued.

- (b) Time required to produce 1 lb. live weight average of 138 pigs—two-third day, or daily increase in live weight—15 lbs.

To bring a 70 lb. bonham to 2 cwt. live weight or 1½ cwt. dead weight requires on an average 100 days.

- (c) Cost of food.

An average price for meal (including malin, barley, offal, &c.), is 7/- per cwt.

At this price potatoes would be worth £1 15s. per ton.

At this price separated milk would be worth 1½d. per gallon.

Assuming these prices, 1 lb. live weight would cost slightly over 3d. to produce, or cost of food to produce 1 cwt. live weight—28/11, say 29/-.

- (d) Attendance, food preparation, rusk, &c., would be covered by a charge of 3d. per day.

Total cost rearing a bonham from birth to 1½ cwt. dead weight.

Birth to 12 weeks old, ... ..	£1 3 8
12 weeks old to 224 lbs. live weight—	
Food, ... ..	1 19 7
Attendance, &c., 100 days at 3d., ...	0 6 3
	<hr/> 45 9 8

Or £1 16s. 9d. per cwt. live weight; or 45/4 per cwt. dead weight.

N.B.—This is cost of raising to breeder who fattens as well as breeds. The cost to fattener who buys bonhams may be from 5/- to 10/- more when he pays more than cost of production for bonham.

In Closakilly the rearing of young pigs is largely in the hands of smaller farmers. Since 1912 sufficient bonhams are not being raised. Price is out of proportion to that of pork, being often up to 60/- per cwt. live weight.

Breed has nothing to do with decrease in pig keeping, so useful thrifty pigs are bred and easily procurable. Fattening pigs in winter is favoured, and arrangements are made accordingly as potatoes are available from October onwards.

The objections to excessive winter fattening are—

1. Best pork producing season is missed—May to October.
2. More food is required to produce the live weight October to May than May to October.
3. Separated milk is scarce.
4. Pork commands lower price.
5. Crump and other pig troubles more prevalent in winter.

Up to the previous day he had been under the impression that more pigs were fed in winter than in summer, but a table he had obtained from the Cork, Brandon and South Coast Railway had shown him the contrary.

It was evident that in West Cork June and July are the months in which pigs are bought most freely. He suggested that farmers were more busily engaged in feeding calves during April, May, and June.

He thought it would have an effect if the public were notified that pigs command the lowest price in winter, and that rearing and fattening in summer were recommended.

There are two systems of marketing in West Cork :

1. Sale by hand in the local fairs.
2. Delivery at railway station for consignment to curers.

The former is the more prevalent. Both are unsatisfactory from the farmers' point of view. In the first place he does not believe he is selling in an open market; he believes the price is fixed in the morning,

and he is selling a commodity the value of which he is only guessing. The jobbers will not buy pigs by weight; they are usually connections and know one another and have facilities for making a general arrangement of prices. Then they have such a practical knowledge that they can judge a pig very closely, whereas the small farmer cannot possibly have the same idea of the weight.

There is no analogy to selling cattle, where there is far more open competition. The farmer believes there is no competition in the buying of pigs for the Irish curer. His own opinion was that there is competition only when pigs are scarce. The English buyers do not compete for pigs suitable for the Irish curer.

He agreed that it would be desirable to adopt the English system, by which fat stock are sold by weight and everything passed over a public scales. This would enable the animals to be disposed of at regular rates.

The objection to sending pigs direct to the bacon curer through an agent, and in practically every town in the south of Ireland there is an agent for the curer, is that beyond stating the current price per cwt., the weighing and classing of the pig and price paid are in the hands of the curer, and that there is a delay in receiving payment. There should be some system of weighing before the pigs are consigned to the curer. He had an instance of two pigs being cut 10/4 for being each respectively 1 lb. overweight.

Mr. J. D. O'CONNOR, Keshurst, Breeder and feeder of pigs, and agent for curers, appointed by County Cork Committee of Agriculture.

Mr. O'Connor considered the shrinkage in the number of pigs kept in 1913 to be due to the high price of feeding stuffs and the low price of pork in 1912, and that farmers killed off a number of their sows. A waiting period ensued, and when times got better he got into pigs again, but was not ready to realise the higher price prevailing in 1913. From the prices of meat and pork in 1903, 1904, and 1905 it would be seen that it was not actually the year that pork fell that the effect would be shown, but rather in the ensuing year.

He had no record of the price of potatoes during those years, but farmers in his district only grew what they used themselves, and the household offal would have no effect on pig feeding.

In order that pig feeding should be a profitable transaction the farmer should get 60/- for pork. In his district pig feeding was now on the increase. Last year for the reasons stated it was decreasing. Some people in Cork feed as much as 500 to 400, keeping an average of 250. There was plenty of competition in his district, and people were pleased with the arrangements; they had the live scales and the agency. On some days the live scales and agents for dead meat competed. The man who was not satisfied with the scales got the weight, took the pig away, when the live men was at once looking for it, and the pig went direct to the curer. He knew of scales in Chalewille, Malrow, and Fermoy. He liked to see the three systems operating in every town and plenty of competition. The farmer, however, is realising that the live weight is best for him. When the pigs are weighed they are sorted into uniform lots.

The pig buyer does not like the scales; when buying in competition with it he pays a higher price and secures the animals. There is no doubt that the scales places the farmer in a sound position and enables him to come to a conclusion about right. The pig buyers do not buy in over the scales but compete against it; their market is the bacon curer, and they also ship a good number. The shipper was a necessary asset, as he buys chiefly the sows and other animals that the curers will not take. There was, however, no competition from the curers for these animals, nevertheless there is fair competition.

The price of Indian meal had a great deal to do with the feeding of pigs, but pork fluctuated more.

COCK, 17th November, 1914.

Mr. J. D. O'Connor—continued.

Mr. Denis O'Callaghan—continued.

In winter there is a scarcity of skim milk and he had to pay 1d. a gallon. He accordingly used an experiment with treacle and found it admirable, diluting a gallon with twenty of water. The treacle is 14 lb. to the gallon. At the start he used a little milk to get the pigs to take treacle. Along with this he gave to each store daily 3 lb. of a mixture of two parts fine Indian meal and one part pollard, increasing the amount as the pig grew, up to 6 or 7 lb. for the last three or four weeks. He also tried a 1914s bran. His pigs never cramped. He noticed the treacle made the pig weight and sell well both alive and dead, and gave a coating of lard on the kidney. He considered that 1/- worth of treacle equalled 5/- worth of skim milk at 21. a gallon. He had seen it fed to young pigs with good results, but he fed pigs over 12 weeks old. It had, of course, a laxative effect but it kept the pigs in good health.

He experienced great difficulty in getting skim milk and there is waste of time sending for it. He agreed fully with Mr. Adams as to the returns from different foods; but differed from him when he said that when pigs were 14 to 18 cwt. it gives the best return for the food. He had proved this by actual experiment supervised by the County Inspector.

Proper housing had a good deal to say to the thriftiness of pigs; the small farmer cannot get a loan from the Board of Works; many of them are in a worse position as regards building than the labourers, and some provision should be made to give them loans at a low rate of interest for building improvements. The levatories attached to R.D.C. cottages were now often turned into pig houses.

At present bacon cures were cutting at 1.3.0 dead. He suggested that this be stretched to 1.3.14 so as to create competition with the shipper. The cures might also divide their price and make the return to the farmer more general. He believed it paid better to bring a pig to 1.3.14 than 1.2.5. He realised, of course, that the cures had to get pigs suitable for their market. The only objection he saw to his suggestion was that it might be doing an injustice to the farmer who produced the proper weight so that the other feeder would be at a less serious loss. But a more universal price would be an incentive to pig feeding.

Owing to the variation in the price of meal and its present high price he thought farmers would be well advised to grow barley to take the place of a good deal of the Indian meal. If the crop turned out more profitable to sell for milking he could do so, and try meal. He would at least be in a position to raise bacon at a fixed price; and an increase in tillage would mean more pigs.

He believed an increase in tillage would result in an increased number of pigs being kept. Nothing the farmer could put his hand to would pay better, and one labourer could attend to 150 pigs a day when raw food was used. The amount of food that went to produce had a good deal to do with some of the grumbling by farmers.

He testified to the general educational value of the Department's work and that of the County Inspector in improving pig breeding.

Mr. DENIS O'CALLAGHAN, Newmarket, Co. Cork.

Stated he had been breeding and feeding pigs for upwards of thirty years. The shrinkages which had occurred several times during the past twenty years he attributed to the irregular and sometimes very low price received for pork as well as the fact that the cost of feeding stuffs did not correspond nor did the price of pork correspond with what was paid by the consumer for bacon. He had not previously been aware that the price of pork was regulated from the other side. The impression prevailed over here that the cures kept their finger on the pulse of the pig trade and that when it was about to die out they gave improved prices as a stimulus; that they could not do this was it not that the pig, unlike horses and cattle, was a prolific animal. People, however, were tired of all these fluctuations, and could not understand them.

Pig feeding was not so extensively carried on in his district for three and such causes as the scarcity of labour compared with twenty years ago, and consequently more work that had to be undertaken by the individual, as well as the higher standard prevailing amongst workers.

The growing of more potatoes would probably effect an improvement, though tillage in his district was dying out. He believed pigs would not be so plentiful next year as they were not paying just now. Pork was now 88/- and meal 28 a ton. He wanted the price of 7/- out of meal for 1 cwt. of pork, that would cover the cost of rearing or buying the boarham. He would not feed pigs with potatoes if he got 64/- a stone for them. He fed raw meal, and would find no difference between the raw and cooked.

As regards breed, he preferred the pure bred pig as far as possible, and to sell by weight. If the latter were always done it would do away with a number of inaccuracies.

In feeding pigs he took into consideration the price of pork compared with feeding stuffs. If more home-grown stuff were available there might be less fluctuation; but it was more probable that any extra food produced on the farm would go for cattle feeding etc.

Mr. WM. O'CALLAGHAN, Searrogh, Malrow.

Stated he was a breeder and feeder of pigs, and he believed that one of the main reasons urged against the keeping of pigs was the fluctuation in the price of pork. If farmers could look forward to a steady price, even though a small one comparatively, they would be more inclined to take up pig feeding for the sake of the manure that would be available. He believed, however, that more sows were being kept than formerly and inferred that more pigs were being maintained in his district, but still more would be kept were pork prices uniform.

His experience was that pure bred sows are not so prolific or good nurseries as the old type, though certain strains of the pure type might be all right; people who get into the pure bred animals found it desirable to get out of them. At the same time he should say that the cross with the pure bred boar gave excellent results. In the Cork shires there were classes for pure animals only, and people bought pure bred sows to compete in these. He would suggest that such classes should be open to all sows.

He considered that better housing accommodation would induce more people to go in for pigs; he referred more particularly to the small farmer. He thought levatories should be distributed giving plans of levatories, and that the Agricultural Inspector should do more in this connection. The results from the use of raw food should also be more widely disseminated.

Farmers believed that the heavy pig paid; and people should be enlightened on this point. His belief was that a greater turn over of young and lighter pigs left the best profit.

The marketing in unsatisfactory, being in the hands of too many middlemen. The bacon cures were not considered to be honest. He believed they could do a great deal more to encourage pig raising. There was also a belief that the success of the bacon business in Denmark was due to co-operation.

In Malrow pigs are taken by dead weight, but the people were not pleased with the return. They were not sold by live weight. The business would pay if feeders could rely on getting 60/-, and feedstuffs at normal prices.

He kept pure bred Large Yorks as well as crosses; the latter gave better litters. The country would be better off but for the pure land boar, though the common sow was preferable.

Mr. MICHAEL J. CRONIN, Bankeer, Co. Cork.

Stated he had been concerned in the pig breeding and feeding industry for a number of years. Owing to the high price of meal for the first six months of 1913 and the poor price for pork farmers had to sell at a loss, and consequently got disgusted with pig rearing.

CORE, 17th November, 1914.

Mr. Michael J. Cronin—continued.

Mr. Michael J. Cronin—continued.

In September, 1913, pork dropped; farmers would then be sending their sows to the boar, instead they got disgusted and sold them off. Few farmers care to have bonanzas during the winter months, as milk is not available. He did not think that the rise in pork after June, 1913, induced the sale of sows, instead farmers would be more inclined to go in for breeding on the chance of the good price holding. He believed that the low price of pork and the high price of meal some time previously were the chief causes of the shrinkage in 1913. Although good prices prevailed during that year farmers owing to their recent experience of poor prices were slow to get into pigs again. It was only at the end of 1913 or beginning of 1914 that pigs increased in any numbers.

At the present time pigs were not paying, though good prices were being offered. Meal was very dear for the past four months, having at one time reached 34/- per sack. When calculating profit, feeding stuffs could not be valued at current prices on day of sale but on the range of prices which obtained during the feeding period.

The two main factors which would govern the supply of pork in this country are the price of Indian meal and pollard and current prices of pork.

From his own experience and from tests he had carried out recently it would not pay to feed pigs with marketable potatoes. With meal (fine) 17/6 per sack potatoes would not be worth more than 4d. per weight (21 lbs.) for pig feeding.

The results of experiments which he had conducted in 1913 were:—

With eight pigs divided into two lots fed to ascertain value of potatoes for pig feeding:

## 1913.

Average weight at start—2 qrs. 10 lbs.

## Food consumed.

## Lot 1.

106 weights Potatoes.  
18 stones 4 lb. meal.  
279 gallons milk.

Weight at end—6 cwt. 0 qrs. 0 lbs.

## Lot 2.

148 stones 2 lb. meal.  
370 gallons milk.

Weight at end—7 cwt. 2 qrs. 24 lbs.

## 1914.

Eight pigs divided into two lots to test Raw v. Cooked Meal. Average weight at start—42 lbs.

## Lot 1.

## Cooked Meal.

24 cwt. meal.  
271 gallons separated milk.

Weight at end—7 cwt. 3 qrs. 121 lb.

## Lot 2.

## Uncooked Meal.

24 cwt. meal.  
271 gallons separated milk.

Weight at end—8 cwt. 1 qr. 6 lb.

In favour of uncooked—1 qr. 22 lb.

His suggestion for increasing the number of pigs in the country would be to guarantee a minimum price for pork some months in advance. As regards milk, for instance, he could turn up the milk book and find what price was paid for any month of the year previous and for any corresponding month of following year. Price seldom differed except ½ or 1, which might be owing to strength of milk. There was an opinion that a combination existed between buyers to fix prices. But from a statement made by the Chairman to a previous witness that day he did not

believe that a combination to fix prices existed amongst buyers. Curers might, however, give good notice of the weights they would want, and assist farmers in that way. At present it required a sharp farmer to take all the tactics of the buyers. Some years pigs will pay; at other times they will not; the people ran in and out of them, and this, of course, also caused fluctuations.

The farmer should have at least six weeks previous to the market some knowledge of the weight which would command the highest price. At some markets light weights command a better price than heavy weights; a month later it is the reverse.

He did not think the supply of home-grown food would to any extent influence the number of pigs kept. It would not pay to convert land to tillage for pigs alone. His was a store cattle district, and cattle were not affected by fluctuations to the same extent as pigs.

If, as stated, the Dunes claimed they could raise hogs at 42/- cwt. solely off the produce of their land, all he would say was that it would be desirable to have some of them here, as the Irish farmer could not do it. In his part of the country barley did not pay so well as oats, and growers sell the latter and bring home meal for the pigs. It was only the poor people, or people in the poorer class of land kept pigs, those with the fertile land kept cattle.

The common type of pig crossed with the pure-bred Large York bear found most favour in his district. The premium boars were spread over the district—but there was a number of mongrel bears; for the latter, however, the purchasers went outside the district.

Mr. WM. APPELBE, Bandon, President of the Bandon Farmers' Association.

Attributed the decline in numbers to the low price obtained for pork. Some of the high prices they saw in the papers never seemed to reach his district. 60/- or 61/- was probably the highest price in Bandon this year. All were sold by hand (alive); they had never asked for a shilling to be put up, though he believed it would be an advantage to have them bought weekly by live weight, so as to be able to catch the high price when offered.

His Association had been thinking of adopting co-operative methods, as they considered the pig buyers were too smart for them at present in the estimation of weight; no blame with regard to price, as this is fixed by the curers. Another grievance is that those who send in through agents or sell to buyers complain of the cut in price for every 1 lb. over certain weights. He agreed that the line should be drawn somewhere, but considered it would be more equitable to take off, say, 1/- for each seven pounds, instead of a heavy cut for 1 or 2 lbs. In other words, he wanted a uniform sliding scale. If larger pigs could be managed they would pay better, for there is more profit on the last cwt. than the first; pigs have then ceased building frame and have to put on flesh only.

He considered that the old common breed of pig was the best, but they had now become mongrels. The White Ulster is sometimes like that type. The Large York is a slow feller.

His chief point was that the fluctuations in the price of pork was responsible for the decline in the number of pigs.

Mr. W. W. O'DWIER, J.P., Springhouse, Ballylanders, Chairman, Mitchelstown Board of Guardians.

Mr. Dwyer mentioned that his district covered part of Cork and Limerick. His view of the decline in the number of pigs was that it was due to the decline in tillage; and the decline of tillage he attributed to the

CORK, 17th November, 1914.

Mr. W. W. O'Dwyer, J.P.—continued.

cremery system. In the old days farmers made their own butter and had plenty of buttermilk to spare, and plenty of labour was employed, and labourers got milk from farmers to feed their pigs.

Less tillage also means that fewer members of the family and hired labour were required on the farm. Whilst tillage and dairying ought to go well on the farm this was not what was happening. Pig feeding can only be expected to pay on the farm where there is tillage, as there is always a quantity of second rate stuff which can be used for pigs and cattle.

Cremery proprietors facilitated farmers in getting money to put more cows on the pasture, of which large areas were only second rate and more suitable for tillage. The cow was allowed to roam over the land and no labour was kept to attend to pigs or anything else. The system of separating milk at home had been tried. He was told that in some years it paid all right, but at other times it was found more profitable to send the milk to the cremery instead of the cream. Some months of the year they separate milk and make their own butter.

The big farmer only gets into pigs spasmodically; they have not the same labour available the year round. Something might be done to subsidise the cottagers and smaller farmers, who are the backbone of the industry. He suggested a premium for the keep-

Mr. W. W. O'Dwyer, J.P.—continued.

ing of good sows. He did not object to much to the fluctuations in the price of pork, as they were inevitable.

The Rural District cottagers in his district were supplied with pig houses. The Guardians looked in the plans a pighouse and w.c. He was 83 years a Guardian and never heard of the Local Government Board prohibiting the erection of a pigsty with these cottages. Some of the holders kept pigs in this pig house, some did not. He believed pig houses were always supplied in Counties Cork and Limerick.

Although many labourers keep pigs, the number was not one-fourth of what it was formerly. They could keep a bear or two sows if they got some encouragement. They keep a fair share of poultry. The result is that they have no manure for their gardens.

His experience generally was that the richer districts were in grass, while naturally the poorer land was tillage. There was a lot of land growing grass at present that could be more profitably tilled and would provide food for the keeping of pigs, etc.

He considered that tillage would pay the farmer, inasmuch as it would enable him to raise the feeding stuffs for his stock. In his opinion the present system of grass land coupled with the cremery system was robbing the farmer. Labour could always be obtained if guaranteed steady work.

### THIRD PUBLIC SITTING.

WEDNESDAY, 18TH NOVEMBER, 1914.

AT 11 O'CLOCK, A.M.

At the Courthouse, Waterford.

#### PRESENT :

Mr. JAMES S. GOSWOLD, M.C. (Chairman).

Mr. R. N. BORN.

Mr. SWEENEY O'MARA.

Mr. PATRICK CLUNE.

Mr. J. WILLINGTON, J.P.

Mr. O. W. H. ROYLESON, B.A.

Mr. P. W. KENNY, J.P., Kingsmeadow, Waterford.

Mr. Kenny submitted the following tables:—

NUMBER OF PIGS IN CO. WATERFORD DURING RECENT YEARS.

Year.	Boms.	Sows.	Under Six Months.	Six Months and Upwards.	Total Number of Pigs.
1909 ..	59	3,115	19,377	7,629	39,180
1910 ..	48	3,199	18,591	7,175	38,514
1911 ..	63	4,196	24,351	8,479	37,385
1912 ..	50	3,536	23,160	8,211	34,957
1913 ..	39	2,864	18,287	4,859	25,049
1914 ..	41	3,934	23,259	6,121	33,375

## WATERFORD, 1894 November, 1914.

Mr. P. W. Kenay—continued.

## PRICES OF PORK AND INDIAN MEAL IN WATERFORD.

	1911.		1912.		1913.	
	Pork.	Meal, 20 stone.	Pork.	Meal, 20 stone.	Pork.	Meal, 20 stone.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
January ..	54 0	15 0	48 0	19 8 to 20 3	63 0	16 6 to 17 0
February ..	57 0	14 0	54 0	20 3 to 20 6	66 0	17 0 to 17 6
March ..	57 0	14 6	53 0	20 6 to 20 3	67 0	17 6 to —
April ..	56 0	14 6	54 0	20 3 to —	67 0	17 6 to —
May ..	54 0	16 6	59 0	20 3 to 20 9	69 0	17 6 to —
June ..	54 0	16 9	62 0	20 9 to 19 3	62 0	17 6 to 16 6
July ..	53 0	17 3	63 0	19 3 to 16 9	71 0	18 6 to —
August ..	52 0	17 6	65 0	19 9 to 17 9	68 0	16 6 to —
September ..	53 0	18 6	69 0	17 9 to 17 6	67 0	16 6 to 17 0
October ..	47 0	19 0	61 0	17 6 to —	62 0	17 0 to 16 6
November ..	46 0	19 4	56 0	17 6 to 16 9	62 0	16 6 to 16 3
December ..	44 0	19 8	60 0	18 9 to 18 6	65 0	16 3 to —

His conclusions were that the price of Indian meal in relation to the price of pork for the time being would, judging from quotations and live stock returns, seem to be the deciding factor with breeders and fatteners in curtailing or extending this branch of their business.

From July, 1911, to July, 1913, the price of Indian meal was out of proportion with the local quotations for pork and store pigs. Many farmers reduced the number of their sows or gave up the industry during this period. As the decrease in sows was gradual the effect on the supply of stores or young pigs did not show until later. In the latter half of 1912 quotations for Indian meal and pork were more encouraging, but the Foot and Mouth restrictions curtailed the export trade, and farmers continued to lessen their stocks of sows. In the present year prices and conditions are normal and the industry has made a rapid recovery.

After a year of great plentifulness of supply a lean year may naturally be expected. In 1911 there were more pigs in Ireland than for any other of twenty years excepting 1896. The extra number held in 1911 meant that the price of pork was low, with food-stuffs normal; people were not satisfied with the returns and got out of the business, this told in the next two years.

Local haunch curers fixed the price of pork from time to time according to the graded weight of the finished animal. The pig finished between 1.2.0 and 1.3.7 commanded top price. The cut from 1.2.7 to 1.3.0 was 1/-. The price was arbitrarily fixed. The Berkshire trade did not concern Waterford. From 1.6.0 to 1.8.16 there was a further cut of 3/-. There was no quotation for over 1.8.14, as heavy pigs were usually shipped alive to England by the pig-buyers.

The merchants bought by town weight; the jobbers bought alive. In some towns agents buy by live weight for the merchants. The heavy weight pigs made most money when shipped for the English market.

\* PIG FEEDING WITHIN THE MUNICIPAL BOUNDARY OF WATERFORD. (Population, 27,564; area, 1,300 acres).

	1912.	1913.	1914.
No. of persons keeping Pigs .. ..	111	114	104
No. of Pigs fed by householders ..	267	320	324

\* Figures taken from the records of the Corporation Public Health Committee, 1902-1907.

The Public Health Committee had always been sympathetic in dealing with parties feeding pigs so as to encourage thrift, provided the premises were kept clean and sanitary. Very few sows were kept in the city. It would accordingly be seen that the more rigid administration of the sanitary laws had no tendency in Waterford to diminish pig feeding. The Public Health Act was passed in 1878 and became operative in 1903, and from the latter date there had been no decrease in the number of pigs kept. The limit of 50 feet at which pigs were supposed to be kept from the dwellinghouse was not too strictly enforced, each case being considered on its merits. He might mention that even under old conditions the private houses in which pigs, sheep and cattle were killed and hung were kept scrupulously clean; and the administration of the sanitary laws since had not always secured this.

Compared with Wexford he would characterize Waterford as a grass county. Potatoes were largely used in the city and country for pig feeding. The price last year would generally be about 6d. a stone. The sows grown were small, however, and only met the local consumption and trade.

Indian meal seemed to be the basic food for pigs; it had been said that the decrease in 1913 was to some extent due to the discontinuation of servants to engage in pig breeding. He did not think, however, seeing that the shrinkage was only temporary, that this could be regarded as a factor. The use of raw foods might be taken as an offset to the natural tendency of servants to shrink the drudgery of pig feeding.

The figures he had given for Waterford City did not include a large number of pigs fed at the local asylum and workhouse. As he found he could not feed to a profit the steward of the former institution substituted barley grain sediment for Indian meal, which is mixed with the house offal and given in a damp condition. This sediment is a by-product of the distillery in the same way that graine come from the brewery. It is delivered to the asylum in bags at 40/- per ton. There had been no complaint of the pork. Another large feeder in Waterford had followed this example. Both took up this feeding probably in 1911, when returns from pigs were unsatisfactory.

The steward of the asylum pointed out to him several times that the pig leaning to the White Ulster type was more thrifty and finished to a good weight before the others. Premiums in Co. Waterford are given to the Large York and Large Ulster. The local sow is a nondescript animal; but the resulting cubs are more economical. There was no complaint about the pork.

There was great satisfaction in Waterford when pork went up to 30/-. At other times there is dissatisfaction. Fattens never know what they are going to obtain. Those who go out of the business when prices are low are responsible for the slump at times in supply; they rush in again when conditions improve. If a more regular price could be maintained

WATERFORD, 18th November, 1914.

Mr. P. W. Keany—continued.

for pork, pigs would be more generally kept. He did not agree that prices were altogether regulated from the other side of the water. He pointed out discrepancies between the local figures and the London prices for bacon.

There is no provision for keeping a pig or poultry in connection with the R.D.C. cottages. The amount available for the purchase of plot and erection of the buildings does not leave a margin. The only outbuilding was a w.c. Perhaps only one in ten of the holders kept a pig; where they do they put up buildings themselves; these would be more like what pigs before they came into the R.D.C. cottages. Were facilities provided he believed that a greater number would go in for pigs and poultry.

The average sum allowed by the Local Government Board for Labourers' Cottages, building, plot, costs, etc., is £150; this was fixed when the cost of building was lower than at present. The Council receives a rent of 1/- weekly, which has to cover interest and sinking fund and outlay for repairs. There is a loss of about £1 annually per cottage, which is borne on the rates; this was formerly £2 or £4. A Government grant of one-third permits of the maximum of £150; the remainder of the money being lent to the local authority. If the Local Government Board allowed a higher maximum he believed the R.D.C. would put up a piggy and poultry house, which would lead to thrift and industry. The labourer, however, would not pay a higher rent. He would himself favour the erection of such buildings only where the labourer applied for them, and not generally.

The County Committee scheme of Prizes for Cottages, etc., did not provide the spirit of rivalry induced as the prizes keep going to one or two persons, who may be industrious and thrifty beyond the average, but the effect is that others get discouraged in the competition and cease to make any further special effort to secure a prize.

Mr. WM. MITCHELL, Steward to the Earl of Bessborough, Piltown, Co. Kilkenny.

Stated he had experience for many years in the breeding of pigs on a large scale. He attributed the shrinkage in pig numbers to a general rise in the price for foodstuffs and to the extreme changes in the return for pork. The cottager had a pig for sale once or twice yearly only, and if he met a bad market it affected him seriously. The feeder on a larger scale sold regularly and received the benefit of any increase.

Many cottagers who kept pigs now keep fowl. They were induced to do so by the increased return from poultry products, and in his district from the fact that they had an excellent outlet. A local association paid considerable attention to poultry; whilst at their shows there was no competition in the pig classes.

In his district most of the cottages belong to the Bessborough estate, and facilities were given for the keeping of pigs and poultry. Most of the R.D.C. cottages also kept poultry, part of the outbuildings being used as a w.c. and part as a firehouse. He had seen some of the cottages provided with regular pigsties; and had never heard any complaint of lack of facilities for either pigs or poultry.

Indian meal, with separated rye, was the staple food. There was a fair amount of tillage in the district, and when available potatoes were also used. When they ran out mangel were often fed. His experience was favourable to the use of raw meal. When potatoes were plenty more pigs would be kept by the farmer; the labourer using any surplus for poultry. There was a big trade in turkeys. He noticed generally that where there was more tillage more pigs were kept.

Labourers' plots would be tilled about half and half. These covered by poultry were not necessarily unfilled. On the part uncropped a donkey or goat would be grazed. The cottager who wants to till an acre requires some assistance from the farmer.

The Large White York was the breed generally kept and favoured in his district. A fair average quality of animal was maintained; but if more grain and potatoes were produced more pigs would be bred and fed both by large and small farmers. He himself had

Mr. Wm. Mitchell—continued.

tried the Middle White York but could not sell the produce, the objection being to the nose. He had seen good crosses in the north, but the current in the south objected to the White Ulster. Against that buyers come to Carrick-on-Shannon and Dungannon from as far as Dundalk, and the Dublin men buy large numbers. The Large York type is bought quicker in the south. The pigs in his neighbourhood were practically all pure bred Yorks not in the back.

He thought the White Ulster made a good pig and a good sow. He had seen the Large Blacks brought into his and other districts, but they died a natural death.

He had never tried any regular experiments in feeding, most of his pigs being sold to breeders. But he usually allowed 5 lb. of meal daily with some molasses. He believed pigs would grow 1½ lb. daily, i.e., a pig well grown and had fat.

He believed that when a pig gets heavier it makes more; he is drowsy, sleeps more and makes more; it did not follow that he would eat more. Mr. Anderson of Portlaur, who was probably the biggest feeder in Ireland, feeds a heavy-weight pig. He himself only fed the culs, and found better results at the latter end of feeding.

The pure bred Large Yorks are quite as prolific and as good nurses as the half bred animal, otherwise he could not sell the sows to the local farmers. Although not registered, all the pigs in his district were practically pure bred. He considered nine or ten a good litter; any more would mean weak pigs. He thought he saw a bigger improvement in the south of Ireland in recent years than he had ever previously noticed.

Ireland is a cattle feeding country. Denmark is not. The same class of trade is not possible in both. In Denmark dairy stock is maintained principally to supply milk and the bye-products of it go for pig feeding mainly. Yearling calves were the mainstay in his own district here, and was one of the reasons why there was less tillage. If tillage were increased there would be more pigs kept to utilize the secondary products.

Mr. R. C. DOBBS, J.P., Camphine, Cappoquin.

Said that though he followed the markets personally and took a special interest in the subject, the feeding of his pigs was attended to by a steward.

He found the rearing to be entirely different from the fattening; and it was necessary to have a fair amount of tillage to make rearing profitable. There was a difficulty in getting labour, especially temporary labour; there was a deterioration generally, as the best Irishmen were not staying in the country. He could get permanent labour all right; the inefficiency applied to the temporary sort. Wages had risen considerably. There was now no boys or women available in his district for field work, and the difficulty of getting labour was driving out tillage.

Fluctuations in the price of meal and pork were responsible for the selling off of a number of pigs; during last year pork varied from 65/- to 47/-. He would send in a note of the exact dates.\* The quotations in England usually exceeded those prevailing

\* In a subsequent letter Mr. Dobbs stated that he was under a misapprehension, as the report he saw was of a fair in Ireland where there appeared to have been a temporary year. As a matter of fact the Cappoquin Bacon Factory prices were:—

Week ending—	6 August, 1914,	...	...	s. d.
"	18	"	...	67 84
"	21	"	...	59 9
"	26	"	...	65 4
"	3 September, 1914,	...	...	63 94
"	11	"	...	60 14
"	18	"	...	63 1
"	25	"	...	63 8
"	2 October, 1914,	...	...	60 44
"	8	"	...	60 0
"	15	"	...	60 6
"	22	"	...	59 0
"	29	"	...	57 10
"	6 November, 1914,	...	...	47 0
"	13	"	...	56 19
"	20	"	...	56 11



WATERFORD, 18th November, 1904.

Mr. R. C. Dobbs, J.P.—continued.

Mr. Patrick Dunne—continued.

here. He did not, however, understand this part of the trade. Maize, which formerly cost £6, now sells for 47 30s. The Liverpool people would deliver maize at about what he could get in Cork. The price compared unfavourably with corn; and the quality of some had recently been very poor. There was a idea that all had been extracted from the maize meal, yet its price was 15/- to 18/- more than the Indian corn.

The person who kept pigs continuously will find they pay. He weighed his pigs every week and found that they grew better when they got heavier. Some are curiously uncertain. Some weeks they only go up 3 lb., then with a little change of feed they would go up as much as 20 lb. in 7 days; a fair average would be about 11 lb. The older pig is not putting on growth, but is finishing. He, therefore, found it more economical to sell a pig as large as he could, even subject to the risk for overfeeding.

He put the pigs in as stores and sold them at 7 months old, frequently at 14 stones. He had found an extraordinary difference in favour of using dry food. The meal was fed absolutely dry; just damped at first if the pig would not take it. Ordinary potatoes were too dear, but small ones he fed raw just as they were and never had a pig choked. The potatoes are given washed and the meal dry. He got, of course, a good deal of skim milk, but this was given afterwards mixed with pollard. The meal was medium ground. Young pigs got but a small quantity of milk, as too much secured them.

A pig which he got from Clonsilla about three years ago appeared to have brought in a sort of infectious pneumonia which destroyed a large number of his pigs, but this might happen to anyone and there was a fair amount of it at the time throughout the country. He did not even write to the Superintendent at Clonsilla about the matter as he did not think the pig got the disease there.

Leaving out accidents, pig feeding always pays if it is done carefully. The manure enables things to be carried on, but it was hard to get attendance for pigs.

After five months old the pig would get about 4 lb. of brought food and a couple of lb. crushed oats. He would not keep a pig too long on the one sort of food. He gave a pig as much as it conveniently took, and expected 3 lb. gain from about 4 lb. of meal. He had 70 to 80 pigs fattening at a time, and in order to avoid bullying had a series of stalls made.

All the pigs were sent to Cappoquin Bacon Factory, and the weight returned always exceeded his calculation. Heavier animals he sometimes sent to Cork for shipping. The ones going to the factory were fasted 12 to 14 hours and weighed before going. They usually killed 77 or 78 per cent.; 57/- would pay him better there than 55/- in Waterford, and he could send them in as he had them fat. He did not think any of the farmers sold by live weight.

Mr. PATRICK DUNNE, Dungarven.

Stated he was a cessary proprietor. He had experience of feeding pigs, buying them in the market. He thought the supply was more or less regulated by the price of pork; and that the cost of feed had but little influence; as a feeder he did not take it into consideration. It might influence the small farmer or labourer to some extent. The respective prices of stores and pork were his own main considerations.

He paid 35/- to 40/- for four to five months old stores, and fed them on raw food and skim milk, allowing as much of the latter as they would use, though an Indian quantity caused scour. By mixing the food in it he gave a young pig up to two gallons a day. The meal was ground as fine as possible.

He purchased the meal and most of the separated milk remained on his hands, as the farmers did not think it worth their while to take it away; the butter-fat was bought separately and sold, allowing for the separated milk. He preferred at that price that they took it away, though he considered it to be worth more for pig feeding. This supply was, however, available in the summer only; in the winter it was smaller, and he kept fewer pigs. Some is left in the

winter. He also made cheese and fed pigs on the whey, but he would not act as much wise on this. He would put it down at 4d. a gallon, though he thought the pigs did just as well on it as the separated milk. It was used fresh from day to day, but the pigs would consume it even when left over. It contained about 4 per cent. milk sugar.

He considered the shrinkage in pigs to be due more to the fluctuations in pork and the price of the bone-meal than cost of the Indian meal. Bone-meal which he now bought for 35/- sometimes cost him 60/-. Until fat the store would consume about 3½ cwt. of meal; the extra cost for this would be comparatively slight. The main thing was to buy the store right. For the first six months of this year stores were high, and though the breeder was having a good time, the feeder could not make them pay.

The difference in the price of Indian meal and Indian corn would be about 1s. 6d. a sack; and about 6d. a sack would be enough to allow for grinding. Prices in Indian meal are out very low. The difference in the wholesale price of corn and retail price of meal would account for a greater difference in respect of grinding.

One of the reasons given by farmers for not keeping pigs is the scarcity of labour and trouble of boiling. He had fed on raw food and found it just as successful. He used a little pollard and barley meal, and sometimes for young pigs a little bran, but no potatoes. He had carried out tests in this connection but had mislaid the figures. Speaking from recollection he would say that it required 3½ cwt. of meal with milk or whey to raise a pig from about 4 to 14 cwt. If farmers could be got out of the system of boiling, they might keep more pigs, as it would get over the difficulty of labour; if done at all, this must be done now by man.

At the end of 1911 pork was 40/- to 50/- and meal about 41/-; stores fell to a low figure and farmers gave up breeding. A number who breed pigs and sell them as stores don't fatten.

In spring and summer farmers take the largest quantity of separated milk from the cessary for the rearing of calves. When the supply coming to him falls low, less in proportion is taken away. A number of farmers send in all their milk and do not rear calves. Then some of them were feeding pigs in the same way as he did. There was a good market for calves so soon as they were dropped.

The manure from his pigs was in his way, and he showed his mind to do what he liked with it; he usually got something for it from the farmers.

As a rule unless labourers got extra wages they did not like the work of feeding pigs. Many pigs were taken out of the county and fattened.

The real reason why the labourer does not feed pigs is that he has to pay too high for the stores, and is then afraid that he will meet a bad market. They can better afford to buy when the price is 20/- than when it is 30/- to 40/-.

He knew of one man who fed on raw potatoes and raw mangels mixed with meal. He is well satisfied with the results and says he does not know any branch of farming that pays better than selling stores at 4 months. He gives raw food from the time the pig is able to take it. He keeps at the business all the time.

He (witness) sold by live weight and by band to local buyers, who are agents for the cessary. There is a scales in Dungarven but the pigs are rarely weighed before sale, as he could judge the weight and value fairly well without weighing. He did not as a rule, make any pig more than 12.0, so that he got the top price summer and winter. They eat more in proportion to the weight put on when they go over 12.0. They might make a great daily gain, but the proportion of food consumed is greater. He had found this out by weighing the pigs from week to week, and also weighing the food. It was an important matter to him, and he tested it carefully. Some people raised their pigs to 2 cwt., but he considered they used a greater quantity of food after 12.0 in proportion to flesh gained.

He tried to grade the different size pigs in the feeding. A further grading was done as they got more advanced. About ten or twelve were run in a house.

WATERFORD, 18th November, 1914.

Mr. Patrick Danne—continued.

It is well known that bacon cures always pay top price for 14 cwt., but they sometimes change the other prices and grades without any notice. He agreed that the cures should give timely notice of weights they required.

He fed up to 600 pigs at a time and was satisfied when they paid for the skin milk. They paid him year in and year out, but as sometimes he did not know what the stores would cost him there was a loss. Were he breeding pigs he believed they would always pay him. They could not, however, return a profit when they drop to 40/-. It would be an advantage if the pigs were bred more regularly. Farmers, however, are discouraged when prices fluctuate quickly.

He would suggest that there should be no cut between 12.0 and 13.0. He noticed this year that the price of Danish pigs was higher than Irish for a good while. He kept an eye on Danish prices.

He submitted to the Committee the following table showing the Danish prices and the prices paid locally, taken from the *Greener* market reports:—

Week ending	Irish Pigs.		Danish.	
	s.	d.	s.	d.
June 13th, 1914.	55	0	57	0
" 27th, 1914.	54	0	56	0
July 4th, 1914.	52	0	55	0
" 11th, 1914.	52	0	55	0
" 18th, 1914.	55	0	57	0
" 25th, 1914.	54	0	57	0

Mr. JOHN T. CONDON, Samplevalley, Tallow, Co. Waterford.

Stated he was a breeder and feeder, particularly the former. He fattened about half and sold the remainder as stores.

He distributed the shrinkage of pigs in 1913 and 1914 to the scarcity of labour and irregular prices paid for stores and for bacon as well as the cost of feeding stuffs. Permanent labour is not so good as it used to be, and there was hardly any casual. The labourer also objects to Sunday work; he did not think it was a question of wages.

He got a good cross from the Large York and the ordinary sow. Litters would be nine to twelve. He would have to stir up a night or two only when the sows were farrowing. He would watch any that were troublesome. The Large York is a good thriving pig if of the right sort, but he feared the herds were get-

Mr. John T. Condon—continued.

ting inbred, and this would result in failure. Some of the progeny did not mature at all.

Most of the boars were locally bred. The best one, he thought, was a pure bred animal. There were but few premium animals, and this was one of them. The animals he referred to as leaving bad stock were not bought as pure bred; they were simply classed as White York. He believed that unknown to the breeders the pure herds of White Yorks were getting inbred.

He did not mean to say that the pure bred boar was responsible for the poor results. He did not press the point that the boars sent out by the Department were inbred. They bought in his district a number of sows from Lismore Castle. The boar is usually a promising young animal bred in the locality; he could not prove that it was a pure White York. The only way he could put it was that a sow gave two or three bad litters that would not feed.

Pig feeding was not carried on as extensively in his district as some years ago. The feeding of pigs would be affected by a plentiful supply of potatoes, especially if markets for them are cheap. Bought-in feeding at a fair price and a steady figure for pork would at least give the feeder a reasonable margin for profit. It would pay the farmer to feed on potatoes up to 8d. a stone. Some people give equal parts of pulped potatoes and mangels. Sometimes the potatoes are given whole after being washed; there were no bad results. He mixed barley or meal with them.

A good breed of pigs, intelligent feeding, and a proper price when finished would, in his opinion, meet the difficulty and cause a larger number to be bred both on small and large holdings. The breed in his district was fair, but could be improved. He only remembered one or two premium boars in ten or twelve years. Local boars were used, and they might be the result of inbreeding. He had experience of the Large Ulster cross and found them all right. Results from mating sows with pure bred boars available at Lismore Castle were always satisfactory.

He was principally a breeder, and so long as he got 65/- for a 3 months old barrow he was satisfied; if they fell to 25/- he would get out of a sow or two. As a rule he would not get out of the business altogether. Two litters in the year even at 21 would pay, but it is costly to keep them up. When the price got low breeders went out of the business, and this resulted in a shrinkage.

With home grown food and milk at 1d. a gallon the annual cost of keeping a sow would be about 26. He had given raw mangels to sows before farrowing. He believed in giving a variety of food, and not too much; only what would be cleaned up.

A number of people were giving up feeding on account of the trouble and cost of boiling. If it could be made widely known that raw food gives results equal to cooked it would be desirable. He believed that milk was necessary for young pigs when weaning.

## FOURTH PUBLIC SITTING.

THURSDAY, 19th NOVEMBER, 1914.

AT 11 O'CLOCK, A.M.

At the Courthouse, Ennisceorthy.

## PRESENT:

Mr. JAMES S. CONNOR, M.P. (Chairman).  
Mr. R. N. BOWEN.  
Mr. PATRICK CULLEN.

Mr. J. WELLSFORD, J.P.  
Mr. O. W. E. BOWEN, M.A.

Mr. T. O'CONNOR, Spring Farm, Ennisceorthy.

Mr. T. O'CONNOR—continued.

Mentioned that the dead weight price of pigs in September, 1911, was 58/- and Indian meal 17/8 per cwt. sack, other feeding stuffs being proportionately

dear. In October pork dropped to 45/-, while the meal reduced only 6d. a bag, at which price it stood during November, with pork dropping to 42/-.

ENNISCORTHY, 19th November, 1914.

Mr. T. O'Connor—continued.

December, pork was 42/- and maul 17/3. In 1912 the respective prices were—January, 45/- and 17/9; February, 48/- and 18/3; March, 50/- and 18/6; April, 52/- and 18/8; May, 55/- and 19/-; June, 56/- and 18/9.

These figures showed that in the autumn of 1911 and beginning of 1912 the low price of pork and high price of Indian meal and other feeding stuffs made people go out of pigs, the shrinkage not being noticeable until the following year. The decrease in Enniscorthy, however, was not so apparent as in other parts of the country. In 1913 the lowest price was in November and December, but in January following it was 59/-, and the price of maul was 15/- only, so that pig feeding was again being taken up.

Neither male nor female servants cared for pig feeding; and very few feeders in the locality could afford to keep a permanent man for the work. The difficulty might perhaps be got over if the margin of profit were large.

The number of pigs killed in Buttle's factory in Enniscorthy and prices were as—

1911	...	21,033	...	45/-
1912	...	26,056	...	52/8
1913	...	19,517	...	61/-
1914	...	12,187	...	37/6 (for 10 months.)

When killed for pork the Black pig was not so satisfactory as the White York for the reason that the fat failed to set and the bacon looked as if from unfinished pig. Merchants cut the price 3/- or 3½/- per cwt., and people are getting out of them. Some like the breed, as they say they are good sucklers, and do well.

Trouble was caused some years ago by the introduction of a tainted kind of white hog by private individuals, and for a long time breeders were sceptical of the pure white breed. He thought it was a small York. He had no experience of the Ulster; one that came to the district did not give satisfaction; he did not know the owner's view of it.

In his opinion, and he believed in that of the bacon curer, the Large York was the best, a pig between 10 and 14 stone dead weight. If the animal was within the weights the curer did not make sufficient allowance for quality. A cut was made for over 1 lb. overweight. A sow for which the local price was 31/- live weight, he freely got 36/- from a shipper, solely because of the quality. He did not know any curer that took sows. The live weight the previous day for sizeable hogs was 43/- and for sows 34/6.

The cut is on a sliding scale, which is always applied; it is from 14 to 15 stone, 1½/- 15 to 16, 2½/- there were not many pigs offered over that weight, as sellers wish to obtain top price, which can only be got by having them at proper weight. A complaint is that the price is cut for even 1 lb. overweight. Another grievance is that 1½/- more per cwt. is given to dealers. The dealer, therefore, who could buy 100 pigs in the day averaging 2 cwt. would have 210 more than the producer. The farmer did not get the extra 1½/- though the pig was sold direct to the curer. He did not want to squeeze out the dealer, but he was of opinion that the breeder and feeder should receive all the encouragement possible from the home curer. The dealers had the English market to buy for. One of the reasons assigned by the curers for their action in this connection is that if they want 100 or so pigs the dealer will collect them from the farmers and that he was entitled to something extra for this work. Dealers generally buy by head, and he had some an instance of 17/8 clear profit being made on three pigs sold on the scales over what the dealer paid the farmer.

The pigs in his district were mostly fed on cooked food. He used palm nut meal, which is about 12½/- per bag of 2 cwt. now, barley meal, bran and pollard in equal quantities, steeped, and later mixed with a pot of boiled Indian meal; the whole being fed partly warm. He had not tried raw meal. Palm nut meal was generally used, as well as coconut meal, which is 28 per ton. He mixed some barley with the Indian meal and pollard. The retail prices at present of pollard was 8s. 8d., white bran 8s. 2d. and

Mr. T. O'Connor—continued.

6s. 10d. per cwt. Most people used the cheaper granulated meal, Indian meal; if used raw the fat maize might do better.

Enniscorthy was probably the best pig breeding district of the country, and the few premium bones were quite insufficient. The same remark applied to premium bulls. The large number of pigs kept in Wexford was due to its being a tillage country. If he got nothing but the mares as a profit pigs would pay him. It was good for all crops. All the potatoes were used on the farm. There was only one creamery and very little skim milk; most of the farmers had separators. Along the coast about Ballycaner was most of a dairying district. Where available after calf feeding, buttermilk was used for piglet stores and sold from 8 months old at from 22/- to, say, 48/- for five months, the latter would be between 6 and 7 stone.

Pigs were kept in Enniscorthy by small holders. He was not aware that the sanitary regulations had any effect on pig feeding. He was a member of the local Council and knew that pig sties were provided. Labourers generally kept them, and would do so except they were actually not paying. The garden was cropped with potatoes, the effluent going to the pig. Some of them also kept sows. The cessages owed the Council £138 10s.; ten pounds was allowed for the cart-offices, piggery, henhouse, lavatory, and manure depot. He did not think it was generally practicable for labourers in rural districts to keep sows; it interfered with the tilling of the plots, and there would also be a difficulty in getting milk.

He believed that the variations in prices of meal and pork were the causes for the shrinkage in the number of pigs. The curers told them Danish bacon was responsible for the fluctuations. In his district, while people occasionally reduced their stocks for these reasons, the industry was generally maintained.

There was good competition, as pigs were sold to a local factory, on the scales, and to buyers for home curers as well as shippers.

The only suggestion he could make to increase the production of pigs was more tillage and larger sowing of potatoes. Though Wexford was a good poultry county it had not displaced pigs.

Mr. R. RICHARDS, Farnell Street, Wexford.

Stated he was engaged in the live pig trade. Pork went to a high price in the latter part of 1912, with the result that a number of people fattened off the sows.

He shipped a large number of pigs, and the ten hours' detention of the port of disambulation enforced by the English Board of Agriculture affected him seriously. Where formerly he shipped 100 pigs on Friday to be killed next day, they had now to wait over until Monday. There was an extra expense of 2/- entitled and a loss of weight of 4 lbs., or practically 4½/- per pig. Previous to the existence of Foot and Mouth Disease in Ireland it cost 6/- per head to send pigs from Wexford to Bristol and 7/- to Birmingham. During the existence of Foot and Mouth Disease all pigs had to be slaughtered at the port of landing, and his expenses in consequence were practically prohibitive, it costing as much as 12/- to deliver a pig of similar weight in Birmingham. These expenses have, however, since been reduced as pigs can now, of course, travel inland, subject to the ten hours' detention, and it now costs 8/6 to deliver in Birmingham and 7/0 in Bristol. The consequence was that he could not afford to pay the producer as well. The Department should press the English authorities to reduce the detention period as regards pigs on the ground that they were going to be slaughtered at once. It was a big trade, as the numbers which left Ireland were as—

		Approximately
1909	...	316,000
1910	...	301,000
1911	...	333,000
1912	...	322,000
1913	...	197,000

ENNISCORTHY, 19th November, 1914.

Mr. R. Richards—continued.

The year 1914 will probably show a further decrease. The falling off owing to the detention was obvious, and this together with the extra cost lessened competition between the exporter and the home owner.

From the autumn onwards was the period for exporting heavy and sleeker animals for certain markets. In summer they were not exported under 12½ stone. He sent thousands, 10 to 13 stones, from Wexford and Waterford counties. A pork pig is up to 70 or 80 lb., they are not purchased in this neighbourhood, being worth more as stores. The pigs he shipped were principally to Wiltshire and Somerset owners, who offered him a price for one or two hundred.

The cost of sending from Wexford to his markets in England would be 7/6 to Bristol and 8/6 to Birmingham; he did not know the price at which they were sold for bacon; but so far as he could see it came back to Ireland and was sold cheaper than the home bacon, though the pigs were bought in this country in competition with Irish merchants.

The sleeker pigs went to Wiltshire, and those over 14 stone to Birmingham for sale as fresh pork amongst the masses in that part; a trade that was likely to be maintained. Young porkers went to London and South Wales.

The cultivation of early potatoes in his district had interfered with pig keeping, as the people found a better market for their potatoes. One man in Kilmore was growing up to 8 acres for the early potato trade.

The fluctuations in the price of foodstuffs and pork influenced pig keeping. Stuff is too high to make feeding remunerative.

It was difficult to find servants willing to do this work, and consequently the farmer often prefers to feed a store bullock. Pigs are kept by the small farmers, and cooked food is used. The women on the small farms (30 to 40 acres) would still look after pigs, and such people perhaps feed as many as their circumstances allow. It continued of the practicability of feeding on raw food more of the larger farmers might take up the business.

In a bad potato season 20 per cent. less pigs would be fed. The price of feeding meal at present had a big effect on account of the quantity of potatoes which farmers were marketing; and but for the existing price of pigs very few would be fattened.

In general the quality of the pigs bred in his district could not be better, the Large White York being the favourite. There were a number of black pigs, but the local merchants would not have them; he had shipped a lot and never had a complaint from Wiltshire or any part of England. He was satisfied, however, that the Large York is a satisfactory pig and that there are not enough premium bairs.

He got 1/- cwt. more for pork than the farmer. The reason was that he graded the pigs to suit the requirements of the owner. He picked out the pigs best suited to his respective outlets.

Artificial fattening had not promoted the pig industry; many people now rely on it instead of keeping pigs to make the manure required for tilling.

Mr. M. J. WHELAN, Slaney House, Enniscorthy.

Mr. Whelan lived in the Urban District and dealt extensively in pigs. He purchased a pure bred Yorkshire boar every Spring Show in Dublin; and during the past couple of years had sold between one and two hundred sows in young kept on his farm in the Rural District.

He considered that the greatest drawback to pig rearing was the fluctuations in price. Foot and Mouth restrictions were at a time responsible. Of about 800 pigs sold weekly in Enniscorthy only some 40 per cent. would be bought on the scales, the balance purchased by dealers, and about one-fourth would be shipped. The restrictions meant that Irish owners could get pigs at any price they wished. No one in Enniscorthy knew the price until the buyer came from

Mr. M. J. Whelan—continued.

Waterford on Wednesday morning, the pig market day, not even the local factory. The local people looked for the price according to Danish Killings, not to the price in London; a rise there, however, was not always followed by an immediate rise here. The ordinary farmer was not conversant with these factors.

Farmers who fed in this district were usually breeders, and the labourer would keep a pig in any case, so that the price of hams was a matter of consideration. The labourer brought his pig or pigs to the scale before the fair, and when he sold brought home a bacon or bonham.

Most of the pigs marketed would be 10½ to 15 stone live weight, or 10½ to 11½ dead. If a pig passed 14½ stone there was now a cut of 1/- cwt. and formerly 2/-; and a further cut of 2/- for over 14½. Yet many feeders preferred to be subject to the cut and to fatten a little longer. He considered pigs done better the bigger they were. He bought on the scales and held over for another market any not 4s for sale. His principal market was through dealers and the local factory.

To avoid labour difficulties he had been feeding on raw meal for the past two years. He could not get a man to come on Sunday on any terms. He used one part barley, one chopped oats, and one pollard, with one part coconut cake whole, all mixed dry. He steeped coconut cake (AT 10s, a ton) for twelve hours and mixed it with the other feed. He got buttermilk (from the churning of whole milk) at 1/- per dozen noggins, which contain 8 pints per noggin, that was about 2½d. per gallon, but used very little of this. Taking the pigs all round, he would give about 8 lb. a day to each. Pigs that did well would put on 10 lb. weekly; pigs from the sow litter generally did better together. When feeding for a lengthy period as distinct from those temporarily kept over he used pain nut meal. Persons who used it were generally those who fed with home grown stuffs. The results were better than from Indian meal.

He would recommend an arrangement for giving premiums to sows similar to the boar scheme. There was no use in supplying the latter if there were no sows. He would also give prizes to farmers producing the greatest number of pigs or keeping the most breed sows on the principle that if the pigs were raised someone would fatten them.

Mr. JAMES HALL, D.C., Bodavogue, Ferns.

Believed that the shrinkage in 1913 was due to the unfavourable prices of pork and feeding stuffs in the previous years. He had been fortunate in keeping up his stock to realize higher prices, but other people had got out of pigs, though they were now starting the work again. He got the best results from a Large York boar.

He used home grown feeding stuffs, two parts barley to one of oats, with pollard, potatoes, and turnips, all the meal being cooked. Whole milk is churned in the district and the buttermilk goes to pigs. In the creamery district, in order to utilise the separated milk, some of the people buy a sow a couple of weeks after farrowing, rear the bonhams to stores, sell, and then fatten the sow. The cost would be roughly £1 per pig, and the sow might represent the profit.

By using bean, potatoes, and pollard he could rear young pigs without milk.

It was difficult to get labour for pig feeding. Good domestic servants were paid 48 and keep. A man got 7/- weekly, everything included, and a little help in other ways.

Along with something for attendance he would be fairly satisfied that it would pay him to keep pigs for the manure alone.

Mr. PATRICK DOYLE, D.C., Carrickbeg, Enniscorthy.

Considered that the difficulty in getting domestic servants to feed pigs was an obstacle to the industry, but the small holder was not affected to the same extent.

ENNISCORTHY, 196A November, 1914.

Mr. Patrick Doyle, D.C.—continued.

Mr. Patrick Doyle, D.C.—continued.

The extent to which the labourer kept pigs depended on the thrift of his wife and the number of his family. Poultry were also kept, but he did not believe that they interfered with the pig.

When he had separated milk in the summer he tried raw feeding, using mangels, barley meal, pol-

lard, and a little crushed oats, with palm nut cake, for both young and fattening pigs. The older animals did better on this mixture than the young. It took four weeks longer to fatten pigs on the raw as compared with the cooked food, but he had not proved this by experiment.

## FIFTH PUBLIC SITTING.

FRIDAY, 20TH NOVEMBER, 1914.

AT 10.30 O'CLOCK, A.M.

At the Town Hall, Limerick.

## PRESENT :

Mr. JAMES S. GORDON, M.C. (Chairman).  
Mr. R. N. BORN.  
Mr. STEPHEN O'MARA.

Mr. PATRICK DOYLE.  
Mr. J. WILKINSON, J.P.  
Mr. G. W. H. ROBERTSON, M.A.

Mr. P. K. WALSH, Bilton, Cappamore.

Mr. P. K. Walsh—continued.

Stated he was not in a position to deal particularly with the cause of the shrinkage in 1913; but pig feeding was not carried on so extensively as formerly for the reason that the larger farmers found it difficult to get the work done satisfactorily, and there were but few facilities for labour saving in the way in which pigs are fed and the houses laid out. Most of the pigs were kept by small holders whose families did the work. Increased facilities for education and the higher standard of education had a tendency, however, to disatisfy the daughters of small holders and the employees of the larger farms with work of this nature. Those working for themselves looked at the matter from a different standpoint.

The fact that many creameries take the separated milk off the farmers' hands saves them from having to keep pigs to consume it. Those who had fed largely on Indian meal were doubtful as to whether its use during recent years allowed a profit. This fact and the fluctuations in the price of pork were responsible for fewer pigs being maintained. Those who fed on home grown food were less inclined to have regard to the comparative cost of feeding. The high price of Indian meal was probably more responsible for the shrinkage than the fluctuations in the price of pork. It would be a great advantage if feeders could be convinced of the utility of raw food.

His sows, though practically pure bred, were allowed most of the time to run on the grass, and given rough shelter only; cabbage, turnips or mangels being thrown to them in the winter. He had sold pork for less than 40/- He had never succeeded in hitting a high price in the rise and fall of prices at the show.

Some of his sows were producing comparatively small litters, and his neighbours had a similar experience in the spring of 1913. It was not due to one bear alone. He did not know the cause. The District could do with more well bred bears of a larger and lengthier type, as the sows were getting a bit too net. Young pigs that would be fat before reaching 1½ cwt. were unsuitable.

In respect of breeding, more attention should be given to maintaining strains of good breeding sows.

The average weight of pigs from a premium boar would at six months be 1½ cwt., and this he considered would pay, but a number did not run to this. To his knowledge there was at present no better boar than the Large York, and when he left this animal it was only to go to a larger boar that he knew was giving better results.

He looked upon the pig as paying him better than anything else. Under proper conditions, even when

prices are lower, they should pay. He, however, filled a large proportion of his land and was able to maintain a regular staff of labour, and consequently had no difficulty in getting employees to attend to pigs. Among these facts the problem could best be solved—tillage, dairying, permanent labour.

He was conversant with Danish conditions, but they were not comparable with those here. They had a widely organised system to produce milk, using nearly all the separated for pig rearing. A direct way of extending the industry here would be by reducing the rearing of calves. He did not believe that the rearing of all the bull calves would give the same return as pigs. He was told that some shopkeepers in a certain district, who had to buy all their supplies, were keeping up to 100 pigs, and the farmers should certainly be in a better position to do so.

The Department should take steps to specialise in giving up-to-date labour saving information on housing and feeding. This could best be done through the medium of a local demonstration farm under the charge of the county instructor, though he recognised the difficulty of taking this officer away from his regular work. The labour saving devices should be on the lines of the feeding troughs at Glasvin, and simplified to meet the needs of small holders.

The results of the experiments on the Department's farms were known, but they had not the same effect as if demonstrated locally.

Fluctuations in prices of pork placed the farmer in an unfavourable position with the curer. It was possible the latter could not help himself, but the farmer could not ignore this point. He complained of fluctuations on different days in the same week.

Pigs were more troublesome than other farm stock, so that anything prejudicial to the industry should, where practicable, be eliminated. He believed that the bacon curing trade was a well organised business, as was also the trade in feeding stuffs; much more so than farming; at the same time he thought it right to say that there could be more of a ring in Limerick as there are stores in the town where the seller could follow his pig and see it weighed. He was obliged to follow the argument that the curer were controlled by London prices.

As a rule labourers in R.D.C. cottages kept pigs, but not to the same extent as formerly. Pig houses are usually provided. He would not say that poultry had taken the place of the pig; those who had been in the habit of keeping the latter continued to do so.

LIMERICK, 20th November, 1914.

Mr. B. BENNETT, Managing Director, Messrs. J. Matterson and Sons, Ltd., Limerick.

The shrinkage in pig numbers in 1913 he attributed to a variety of causes, one of them being the outbreak of Foot and Mouth in 1912, and at the same time a various strike, both preventing the shipment of pigs to England and throwing on the hands of curers here a class of pig that they did not want. The effects were not noticeable in the shrinkage until the following year.

The price was good in 1913 because the supply was small. The price in 1912 was 35/-. The prices of 45/- and 46/- at the end of 1911 and beginning of 1912 were nominal only, as the curers did not always get pigs for that figure. If pork were low and feeding stuffs high it would certainly influence the numbers of pigs kept. He had the Department's figures relating to the number of stock, sows, etc., in recent years and did not question them.

Pig feeding was not carried on so extensively as formerly because a large number who formerly fed in the towns and neighbourhood were now restricted by the operation of the sanitary laws, which pressed upon thrifty people. He was not objecting to these laws, but merely drawing attention to their effect.

The town pigs were satisfactory. He remembered a time when there was a weekly market, but it was now discontinued now. He believed, however, that more pigs were being raised in the rural districts, and owing to the establishment of small holdings in the West the curers were getting a bigger supply from there.

The Curers' Association spent £80,000 in putting out pigs. They did not feel called upon to continue this work since the Department's scheme was started, but they were still operating in Cork. It was purely a matter of business to do so as there were some very bad ones which it was to their interest to get rid of. Where most of their money had been spent a superior article is produced. There are some districts from which the supplies are still unsatisfactory. Some hethery animals are coming from Kanturk. The curers, however, had no fault to find with the quality generally, but the Department should keep their eyes circled.

Bonhams were usually sold at from eight to ten weeks, some of them realising 35/- in August, but he thought the results to the feeder were not always profitable.

He did not believe pigs would be regularly fed until farmers bred the bonhams, and with this view he suggested that they should be encouraged to keep sows and to continue at the work. The curers must keep their business going whether it pays or not. Some farmers did not till enough to feed any pigs. He was certain that a plentiful supply of potatoes would result in more pigs. The potato or barley fed pig looked the best and gave the highest dead weight. In the buying by live weight a lot depended on the amount of feeding given immediately before sale. He was not against the use of raw feeding but had never tried the system; he personally fed on cooked food.

The current price of pork depended entirely upon outside markets. His firm sometimes preferred to put up with a loss resulting from sharp fluctuations rather than apply them for fear of discouraging farmers. This, however, was not always practicable, as the curer had to meet the competition of surrounding towns, dealers, jobbers, etc.

The Large York suited the curer, and probably everyone else in the south. But if this animal were allowed to run without plenty of food it did not give the farmer satisfactory results. The Middle York was quite unsuitable, and the jobber did not want it either.

If more pigs are to be produced increased tillage was absolutely indispensable, and farmers should be encouraged to breed their own bonhams and keep continuously to the business. At the same time it should be made clear that the home production was not responsible for the fluctuations in price. A pig had never to come from the fair. It is always bought at the one price.

Mr. B. Bennett—continued.

In 1912 when Irish bacon fell off there was a great deal of Danish on the market, and probably as much in 1913; but there were times of the year when prices tended to go down irrespective of the home supply. There is a large supply from Russia and Holland. The reason why the price of Irish pork went up in times of short supply was that some people would insist upon having Irish bacon and were prepared to pay for it.

The curers did not buy sows. These animals went to jobbers and dealers.

There was absolutely no foundation for the statement that there was a combination amongst curers to arrange prices. When the largest buyer (Denary) went to a certain figure the others had to follow or do without the pigs; and the daily prices depended upon that prevailing at the other side. He thought the best thing the curers could do would be to offer £100 to any charity if it could be proved that a ring existed.

The cut for overweight would never reach 50/-. For a pig weighing 1.8 to 1.9 it would be 1/- per cwt.; above that it would be greater as it was more difficult to sell the bacon. It was possible there could be a cut of 6/-. He did not believe it would pay the farmer to fatten after 14 stone. The higher one between 1.8 and 1.9.14 would be from 3/- to 4/- per cwt.

Only the previous day he had sold a number of hogs at 5/- per cwt. less because the bacon was over weight. There must be grades. All farmers understood that a certain weight invariably commands the best price all the year round. It may be a hardship to the farmer to be cut, but the heavier pork has to be sold at a certain price.

Some curers graded from 1.2.14 yet the feeder was given the highest price, and the curer lost accordingly. The long lean pig at 1.8.15 might be as suitable as a short thick animal at 1.2.14, but the purchaser would not go beyond a certain weight. There was a sliding scale for bacon.

The suggestion to spread the cut would apply to a very small number of pigs. The great bulk are bought by head as fast as they can be got, and the buyers cannot make a very close selection. The exact weights only apply to the pigs brought into the stores, which is a small proportion. The tolls are the same on the jobber as on the producer. Dividing the weights would not compensate for the reduced price of the bacon; the present cuts represented this difference. The grievance was a small one, as the curers got a small number of pigs from 1.8 to 1.9.14. They did not want them, 1.8 to 1.9 constituted the bulk of his supply. He would, however, be prepared to consider the suggestion made in this connection.

He got many cramped pigs, and he believed this was due to unsuitable housing. With the labourers' cottages a good sty with a good floor should be provided.

Sir ALEX. SHAW, Representing W. and J. Shaw and Sons, Bacon Curers, Limerick.

Stried he agreed generally with the views put forward by Mr. Bennett. Foot and Mouth disease certainly handicapped the farmer and the shrinkage in 1913 would be contributed to by the low price of pork and high price of corn meals at the end of 1911 and early in 1912. His firm had been very short for about 24 months, but were getting a fair supply now, and he believed the number was increasing. He occasionally wanted a few fat sows but found it hard to get them. This indicated that the farmers were not fattening them. Sows in the ordinary course went across Channel. Most pigs were kept in the tillage districts. In Connemara and about Sligo where potatoes were grown were the best districts, as well as Wexford, but most of that county's supply went to Waterford and across the Channel.

Speaking generally the quality of the pigs was good. There had been an immense improvement on 30 years ago. He was primarily responsible for the Bacon

LIMERICK, 29th November, 1914.

Sir Alex. Shaw—continued

Sir Alex. Shaw—continued

Carew's scheme of providing boars, and in some cases sows, and they had improved Connaught in this respect beyond recognition, as well as Limerick, Glace, and Tipperary. The work had been dropped since the Department took it up. There was only one breed suited for the south, and that was the Large York. Crossed with the ordinary sow it gave the best litter and the best pig. The pure bred animal was probably not strong enough. He had some experience of breeding and would not favour the White Ulster. The Dances turn out a handsome side of bacon, and to meet that competition the Ulster was not suitable. The public wanted lean meat, but the black pig from Connaught had no hair, which indicated absence of lean meat.

The small holder keeps most pigs; he has a little tillage and takes back the skim milk from the creamery. The large holding is simply a grass farm. All the milk goes to the creamery, and not even the skim milk is taken back; instead of breeding his stores they are bought in the market, and the feeder then says that the business does not pay. The price paid for the boarman was a deciding factor with the labourer as well as with the large farmer; the former did not like to give more than 4l. Only for last year's good price for pork the labourer would have lost when he paid 80/- . Moreover, when boarman are dear the labourers cannot afford the price. He would like to know whether it was possible for the County Committee to take into consideration the establishment of a depot where pigs could be bred and sold to small holders at a little over cost price. He could not at the moment suggest a specific scheme.

He had a herd of pigs himself some years ago, and in his factory about a thousand pigs a year were fed, about 150 being on hand at a time. They were bought as stores about 1.6.14 and finished to 3s. 6d. Everything was paid for, including even the water. One year with another those pigs invariably left a profit. The first part of this year, however, was bad as the stores went in dear and sold cheap; later on, however, he got a good price. The pigs were given steamed food and meal. He had never tried raw feeding. He favoured animals from tillage districts, though the dairy pig properly fed on skim milk, barley, linseed meal, and potatoes was all right, but the latter were not so solid. He did not as a rule know how the pigs he got were fed, whether on raw or cooked food. His personal experience would correspond with the evidence already given as to the production of 1 lb. of pork from 5 lb. of meal. The farming community were lamentably unacquainted with the principles of pig feeding, and it is not done on business lines. Moreover they set no value on the manure.

There was absolutely no truth in the allegation that there was a combine amongst the curers. They work entirely independently and there is no ring. He wished, however, that there could be some ring in selling the bacon. The similarity in price is accounted for by the fact that if one firm goes to a certain figure the others have to follow. Prices are ruled by whoever is the highest bidder. Nothing that the farmer sells is subject to the same competition as the pig. In Chesherville, for instance, the seller has first the jobber; the commissionaire who are paid no more for buying and all of whom are working for different houses; the shipper, who makes competition keen for the curer whose prices are high on the other side; and the live scales. If the farmer is not satisfied with the last mentioned he goes back to the jobber, and if not satisfied otherwise he can consign the pig to the factory. The live scale was not popular with the trade as it tended to induce the farmer to look to the weight more than to quality. Its only excuse was that it gave the farmer an alternative. In some instances the scales are public property. In most cases they are put up by the curers, and the price paid for pigs over these is for live weight irrespective of quality. The percentage of dead to live weight was 75 per cent., though some pigs dropped more. The jobbers bid against one another as well as against the merchants, though if they get a quick fair they may try and make a little. He said em-

phatically that there was no trade where the work was more closely and honestly done. There was no trade had done more for the farmer and they had raised the position of Irish bacon in the markets of the world.

Pork will not be set back in price so long as it is within the weight limit. There must be a line of demarcation. He thought it might be practicable to have a sliding scale, but it means another classification and more trouble. It was not now the custom to give 1/- more to dealers than farmers. That arrangement prevailed for some years, but the price to the farmer and jobber is at present the same, though considering the amount of work the jobber does for the farmer he deserves something. In one case the jobber has to pay the carriage on the animal, in the other the pig is brought to the factory by the owner at his own cost. If he sends it to an agent he gets 2/- under jobbers' prices to cover agent's commission and carriage.

Mr. ROBERT BRABAZON, Representing Messrs. H. Denny and Sons, Limited, Limerick, Waterford, and Cork.

Agreed generally with the evidence given by Mr. Bennett and Sir A. Shaw. His firm attributed the shortings in 1913 to the advance in the price of Indian meal in 1911 and 1912, as well as the reduction in the price of pork, taken in conjunction with the high price for cattle. The Foot and Mouth restrictions might have been a contributing factor. In recent years in Limerick, however, he had not noticed a decrease compared with other districts. The sanitary regulations affected the supply in some places. If the supply had been lessened in Limerick it appeared to have been made up in the outside areas. A good or bad crop of potatoes and the price of meal had an important effect on the number of pigs. Potatoes were important in one district and not so much so in another. The current price of pork was also important, but this was largely controlled by foreign competition. It is not regulated in this country.

Some years ago a number of the South of Ireland bacon curers spent thousands of pounds importing boars to improve the breed in the south and west, and the scheme is still in operation in Cork. Taken in conjunction with the Department's work a considerable improvement had been effected. The Large York is the most suitable, and it has the advantage of being an established breed. The premium boars, however, should not be left more than one year in a particular district whenever a change is practicable. He understood it is the practice where the Bacon Curers' Scheme is in operation in Cork to change the boars annually and that the boar is practically presented to the farmer. He realised, however, the difficulty of getting an old boar taken in another district. He thought there was a danger of inbreeding. He, however, personally had very little practical experience of the breeding question. The general quality in Connaught some years ago was unsatisfactory, and he thought inbreeding was responsible. When fresh boars were introduced the improvement was apparent.

Dealers were given 1/- per cent. more than the farmer for pigs brought into Messrs. Denny's factory at Waterford. He wished to emphasise the statement that there is no combination amongst bacon curers as to prices; on the contrary, there is strong opposition; nor is there any arrangement as to the price prepared for bacon on the other side.

His suggestions to increase the number of pigs were (1) that feeders should breed their stores more extensively; (2) more tillage; (3) that a larger number of pigs should be kept in a large establishment properly planned. He understood that such an establishment, which could be worked by a few hands, paid well abroad; (4) the adoption of hand separators and the greater use of skim milk by individual farmers. Hand separating meant that more of the separated milk was kept on the farm to be used for feeding. The cream could be sent to the factory.

LIMERICK, 26th November, 1914.

Mr. M. J. HOGAN, Ballinacree, Berrisokane, Co. Tipperary.

Stated he was a farmer and bred and fed pigs. His experience was that this business had never been carried on so extensively as in the past few years. The temporary decrease he imagined would be due to the Foot and Mouth disease restrictions. When feeding is plentiful and pigs are plentiful prices go down, but after that the price of pigs goes up.

The majority of the farmers in his district favoured a boar of the Large Black type. It makes a good cross for a season or two, but not to continue. There were, however, no black boars in the district now. He feared that there was some inbreeding at present from premium boars. A person in the district might buy a boar from the same breeder that the premium animal came from. He referred to what he believed was such a case. Within a radius of five miles there were two pure bred boars and the results were not satisfactory. He himself held one, and the people would not send sows. He then wanted to get a black boar but the Department's inspector suggested that it might not be wise for him to do so.

His was entirely a tillage district, and there was always a plentiful supply of potatoes. Barley, oats, and turnips were the chief fattening foods for pigs. Fine cooked potatoes, raw gulped turnips, and finely ground meal were mixed and allowed to remain over for four days to ferment before feeding. Milk was not generally available; a little buttermilk or skim milk water being used for the mixing. It took between 5 and 6 months to bring an animal up to 2 cwt. Although he lived in a good pig raising district there was not enough competition as regards buying. Formerly there was a monthly fair. There was now only one live weight scale, owned by Messrs. Matthews. It was accommodating everyone in the district. He himself would be willing to give a note for another in order to provide opposition in buying. He might mention, however, that during the time of the famine the people preferred to let the pigs go to the scales. The only deduction from the prevailing pork prices he understood was 1/- for carriage.

Labourers, as a rule, kept pigs, and sties are provided with the Rural Council's cottages. He was not quite sure that it was suitable for the purpose. The labourers also kept poultry, probably more than formerly. He did not think they displaced pigs. Those who kept pigs continued to do so.

Mr. THOMAS DONNELLAN, T.C., Thomondgale, Limerick.

Stated that he was acquainted for a great number of years with the pig industry in Limerick. He was also a breeder and feeder. He offered the following remarks on notes he had taken during the day. Twenty-five years ago the poorer class of people kept

Mr. Thomas Donnellan, T.C.—continued.

pigs, feeding stuffs were cheaper, there was more competition in buying and prices were fair. There was not, however, the same amount of foreign competition.

He was a member of the Corporation, and could assert that nothing had been done in regard to the enforcement of the sanitary laws to hamper an industry which they considered necessary to the interests of the city. Any reduction was due to the high price of feeding stuffs. There was only one supplier of Indian corn in Limerick, and he had a monopoly. He has a good capital and is able to eliminate competition. He did not blame anyone for the high price, but it was responsible for the reduced number of pigs. The supply might now be increasing, but was nothing like what it should be.

Large farmers were more interested in cattle. He considered the labour difficulty was a minor one as regards the actual attendance required on pigs, but where there was not enough tillage; there was no regular employment. He had never heard of the use of raw food. He found that potatoes gave an early return in pork. He found that with the cost of bonham it took 55/- to make 1 cwt. of pork.

He was aware of the effects of foreign competition on home prices and recognized that the figures here had to be regulated accordingly. He did not believe that this country could continue to compete with Denmark until the same scheme of assistance and subsidy was provided by the Government in this country. The fact that the Irish article had held its position was due to its superior quality. The £3,000 given towards the industry in this country annually was quite inadequate. It should be £30,000. At the time of the strike in Limerick, fifteen years ago, the Dunes got a feeding beer and have held a trade since. Denmark was alive to the importance of this industry, and Ireland awaited a paternal Government to look after the development of its agricultural industries.

When the seller sent in his pig to the factory here he had no knowledge of how the dead weight was arrived at. More confidence should be given on this point. There is no fair or market in Limerick.

The Department should conduct experiments in the fattening of pigs to arrive at a suitable and economical ration and the results should be widely published. Enough attention is paid to the breeding, but the chief point is how to put the pig from the producer to the merchant. This is also to the owner's interest. The latter should have a supply of the best to give to producers when they bring pigs in to the store.

He would suggest that the Department initiate the Royal Agricultural Society of England, by offering cash prizes for essays on the breeding and economical rearing of pigs with regard to their development as a food supply in Ireland.

## SIXTH PUBLIC SITTING.

SATURDAY, 21ST NOVEMBER, 1914.

AT 10 O'CLOCK, A.M.

At the Courthouse, Tralee.

## PRESENT :

Mr. JAMES S. GORDON, B.Sc., (Chairman).  
Mr. R. N. BARR.  
Mr. PATRICK CURRY.

Mr. J. WILKINSON, J.P.  
Mr. O. W. H. ROBINSON, J.A.

Mr. JOHN SLATTERY, Oakpark, Tralee.

Mr. John Slattery—continued.

The shrinkage in the number of pigs kept in 1913 he attributed to the conditions prevailing in the two previous years. Prices were unavourable at the end of 1912, and early in 1913, the sows which were fat-

tened off were fetching 11/- per score, and one of the litter substituted could not go to the boar until eight months old and gave no return for 12 months.

The sanitary laws had an important effect. The pig



TRALEE, 21st November, 1914.

Mr. John Slattery—continued.

must now be kept up to 25 feet from the dwelling house, and this prevented a great number of urban dwellers from feeding. Probably where eight years ago 200 were kept there are not 20 now, though there was a considerable amount of house waste which could be utilized. The Committee could much easier than to get the relative figures from the local market office. He was in the habit of carrying manure from Tralee, and he could not get one load where formerly he got thirty. Provided the sanitary officer saw that the pig was kept properly clean he did not see that the public health should suffer. He admitted, however, that the people had no facilities for storing the manure and it would be impossible under present conditions to provide such accommodation. Perhaps, however, the Town Commissioners could have it removed every morning and sold by auction as manure. Though pigs had decreased in the town the contrary was the case as regards the rural districts.

He considered 45/- in the autumn as good as 51/- in the spring. There is a good supply of feeding stuffs in the autumn. These figures would be all right provided Indian meal remained at 20/- per sack. He fed Indian meal, middlings, pollard, potatoes, crushed barley and some crushed oats. Farmers do not grow enough potatoes to carry them through the spring, so that Indian meal and pollard had to be relied upon. The high price of meal and low return for pork in 1911 and 1912 certainly affected the number of pigs kept by some people.

Pigs were cut for one point overweight. Farmers and small holders were discouraged by the serious fluctuations in prices. There was an idea that the owners arranged prices according to the local supply when two or more fairs are one day. As distinct from cattle, pigs must be sold when fat. If prices could be maintained, even at a low figure, it would give the feeder more confidence. To secure this he admitted that feeders should keep up a regular supply. When pork went up it remained so as far as the retailer and consumer was concerned, and they did not appear to be subject to the same fluctuations.

He suggested that the Government should do as regards pork the same as they had recently done with the sugar supply, though he admitted that the extension of this principle would not be practicable.

At present he would pay £1 15s. for a three months old boarling; he would expect 24 15s. or 25 for it when it had been fed for three months, if pork was then selling at 60/- per cwt. This represented a return of £1 monthly for feeding. He calculated it would require 2½ cwt. Indian meal, 2 cwt. pollard, about 3 cwt. potatoes, and a daily allowance of ½ gallon separated milk. He would be satisfied if he had a profit of about 80/-.

Mr. Born pointed out that the cost of the food referred to would be 44/8 and that based on Mr. Slattery's figures the profit would be 15/8 only. He added that previous evidence had gone to show that it took about 5 lb. of mixed meals to produce 1 lb. of pork; or in other words that a cwt. of pork could be produced for 40/-; the price above this being profit to the feeder. He wished to know whether Mr. Slattery's experience coincided with this.

Mr. Slattery stated that he had not gone into this system of equivalents, though he was acquainted with the results of the pig feeding experiments that had been carried out; these, however, were not set out very clearly. If the price of grain were good he would sell it; if low he would be willing to feed it to pigs. He did not know any animal on the farm that paid better, and he would put the manure against the cost of labour.

He made reference to the discrepancy between prices in Tralee and the figures quoted on the other side; but Mr. Gorman pointed out that the first was for pork, whilst the second was for first quality dressed bacon.

He was aware of the results that had been obtained with raw food; he had tried this system and liked it in the summer but not in winter. As regards saving labour, it would be an advantage if this could be made more generally known. Barrane objected to attending pigs and would not hire on farms where there

Mr. John Slattery—continued.

were too many. On small holdings this did not apply as the work was done by the family. On the latter holdings—he meant those of small farmers, not those belonging to the Rural Council—the accommodation was inadequate to meet winter requirements for housing. More pigs would be kept if better facilities could be provided; and he suggested that, where a holder was inclined to put up a suitable pigery, a small grant might be given by the Department to induce him to do so. Many labourers were now going in more extensively for poultry, but he did not consider that this was interfering with pig feeding.

He was convinced that the Kerry pigs could not be beaten, but the breeding was deteriorating owing to the poor class of boars kept in the county. The Large York made an excellent cross. The premium boar, however, is frequently kept on for four or five years after he has completed his second year premium, and gets too heavy for young sows. Holders of premium animals do not always care them well enough; the Department should not depend upon an annual inspection to see that the houses are maintained in good service condition as owners fed them up just before the time for inspection. Some system of exchange should be arranged so that the boar would not be kept so long, as there was danger of inbreeding; farmers avoided this so far as they could, but often they had no other sire to send sows to. His experience was based on what he had seen in his own district, and there were but two premium boars there in a radius of five miles. A larger number of premium boars were required, especially in his district. Last year he understood that the County Committee were unable to supply all selected applicants, but the Chairman of the Committee could deal with that point.

He considered that the bacon curers should publish regularly a schedule of the weights they recommended farmers to raise pigs to; this might be done fortnightly; it would give confidence to farmers, as they would know what they were doing.

Subsequent to the evidence given by Mr. Denis Slattery, Mr. Slattery of Oakpark offered the following remarks:—

Messrs. Slattery's prices are fixed before their buyers go out. They are simply men trying on their wits for the best price at which they can get the pigs, and Messrs. Slattery finance them.

He acknowledged that everyone knew that certain weights always commanded top price.

If the Department would give a grant towards the erection of piggeries, he was confident that some of the unclaimed premiums in Kerry would be taken up. The houses, even some of those where premium animals were kept, were not fit for pigs. Every premium holder should also have a second light boar.

Mr. D. M. RATTRAY, Gortnashilly, Ballybunion.

Stated he had experience in the breeding and feeding of pigs. His figures as regards Listwood were 14,372 pigs up to 1st October, 1914, and 17,280 to 1st October, 1915. He would say that Kerry as a whole produced more pigs than last year. As regards the decrease in 1915 he would say that the conditions prevailing in the previous year were responsible. He did not believe that the Foot and Mouth restrictions could account for it. The main factors were the high price of Indian meal and low price of pork. The potato crop did not much influence the supply, as waste potatoes only were fed to pigs.

Farmers could not understand why at one market pork should be 45/- and perhaps the next day 41/- or 50/-; while in the shop the price of bacon was practically the same the year round.

Until pointed out to him now he was not aware of the influence of foreign trade on these prices. Of course, neither this trade nor the bacon curers could

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Mr. D. M. Rattery—continued.

have an immediate influence on the retail price; but as a result of fluctuations in the price of pork the feeder really did not know where he was.

He had no personal experience in the feeding of raw meals; if returns from this system were as satisfactory as he was now informed they should be made generally known. He knew, however, one man feeding 100 pigs who was satisfied with the results from this system; this man thought that by breeding the pigs he would secure a better profit, but had since decided to purchase stores.

Bonhams were sold at from 10 to 12 weeks old at from 18/- to 26/-. In Cork they could be got older and stronger.

The breed of pigs in the county is suitable, and farmers were intelligent enough to adhere to the type of animal that met the requirements of the merchants. He believed that the quality was being improved, and that the cross of the pure bred Large York boar and ordinary sow was the best. Provided an adequate supply of pure bred boars was maintained there would be no difficulty in keeping up this improvement.

The people were at present rearing a large number of calves, believing it paid them better than pig feeding, and consequently had not so much milk or other feeding for pigs, but perhaps this factor applied to other counties to a greater extent. If farmers saw that pigs would pay they would probably go in more for them.

There was a good number of labourers' cottages in the county and the occupiers keep both pigs and poultry. The outside accommodation, though built for another purpose, was usually converted into a piggery. Though more poultry is being kept than formerly he did not think they interfered with the pig industry.

He did not consider that the sanitary laws had any appreciable effect on the industry. When they first came into operation they did, of course, drive some people out of pig feeding, but those people had mostly re-adjusted themselves to the situation.

Mr. M. J. NOLAN, J.P., Moyvane, Newtownshandee, Chairman, Kerry County Council.

Mr. Nolan stated he was a farmer, and breeder of pigs, and was for years Chairman of the Kerry County Committee of Agriculture. He attributed the decline in the number of pigs kept in 1933 to the high price of meal and the low price for pork in the previous year. Though these conditions were later somewhat reversed the breeding stock was not available, as a number of sows had been disposed of. Prices were now going up, but the fluctuations in the price of pork deter farmers from getting into pigs. The wages paid to servants had also appreciated considerably. This applied principally to female servants, to whom the work of feeding pigs on the larger farms was usually delegated; this effected a number of persons with even less than fifty acres. It did not, of course, affect the smaller holders so much.

He did not consider that the Foot and Mouth restrictions caused many people who had been in the habit of keeping pigs to give up the industry, though they might get out of it for a time, and it made them slow in increasing the number. In any case there were no local restrictions in Kerry, whilst they had always a local market. There was only the trade in old sows, which were shipped to the other side, and the restrictions affected this.

This year there was a good crop of potatoes, but there was a satisfactory market for them in his district at from 6d. to 9d. per stone. Few farmers raised more than about three acres, and the inferior potatoes were used for pig feeding; then milk was necessary where potatoes were used. Farmers insist on boiling food.

There was a lot of trouble and expense in having pigs. He had fed raw potatoes to young sows, but two of them died. The usual practice is to steep meal in boiling water. He knew that raw meal was given to calves at an early age.

Mr. M. J. Nolan, J.P.—continued.

He would like to see the system of killing at home introduced into the south of Ireland; the old law would be worth 5/- to the farmer.

It is the man on the small holding who usually keeps boars. There were at present several premiums awarded. In North Kerry there is good competition for them; in the south there is not. There is a good deal of trouble attending on a boar, and holders do not like to let it to sows at 1/- then some recompense was required to compensate for the extra trouble required in complying with the Department's conditions. Very few sows of sows objected to pay 2/-. The usual charge was 2/6; there was no danger of their going to inferior sires as the prejudice which formerly existed against the Large York was dying out, and the people appreciated the cross from this sire. He would strongly urge in the interests of the scheme that holders of premium animals be allowed to charge a service fee of 2/-.

He believed that the boars were usually well looked after, and he himself frequently visited the premises where they were kept. He did not consider that the question of inbreeding was causing any difficulty. Of course a man might be inclined to keep for an extra year an animal that was doing well, and he did not think it was desirable or possible to compel such a man to get rid of the boar. People would not let their sows to a boar that became too heavy.

There is a fairly good breed of pigs in the county, and if the Commission could get applicants they were prepared to place out more boars. Farmers at first objected to the premium animals. Not so many of the sires supplied by the bacon curers came into Kerry.

He favoured differential taxation in order to encourage tillage. There would be a lot of refuse or second class produce that could be profitably fed to pigs. He understood that in parts of Germany a proportion of the taxes were remitted according to the acreage tilled. He suggested that in this country a grant for the purpose should be made from Imperial funds, e.g., that the Government should make good the rates on tillage land; even 2/- an acre would encourage the breaking up of the land.

The present instruction in tillage methods was doing good, but more should be given. The Agricultural Instructor should post up notices that he would attend at farms and explain anything necessary. He should also pay more attention to pig feeding and management, and make known the results of any experiments.

The complete cost of a labourer's plot and cottage was in Lakeland Union about £170, the house costing from £106 to £120. The occupants of these cottages were utilizing the privy for keeping pigs. It would not cost much extra to put up a piggery, and he believed it would be a great advantage; he was sure the Council would have no objection. They were, however, in such a hurry to get up houses to replace the old ones that these matters were not thought of.

The sanitary laws had prevented a number of people from keeping pigs, and these had been prosecutions. At the same time he did not consider it advisable in the interests of the public health that pigs should be kept too near the dwelling house.

Mr. DENIS SLATTERY, representing Messrs. J. M. Slattery and Sons, Ltd., Bacon Curers, Tralee.

Considered that the outbreak of Foot and Mouth disease in the autumn of 1933, which kept so many cattle in the country, had the effect of restricting the amount of house room on many farms for breeding sows; that the wet spring of 1933 delayed sowing operations and farmers were not hopeful that they would have the usual return in the harvest; and that the prospective shortage of food in the country deterred speculating pig feeders from carrying on their business to the ordinary extent. His opinion was that pig feeding in the district was looked on with favour by those interested and he expected that the industry would have been more extensively carried on under normal or favourable conditions.

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Mr. Denis Slattery—continued.

Mr. Denis Slattery—continued.

There were two classes of farmers responsible for the number of pigs reared in this country; the first bred and finished their pigs and regarded them as part of the regular farm stock. They wanted no information as to whether the industry was profitable or not. He would not look for any fluctuation in the number kept by such men except in extraordinary circumstances, but such occurred in the latter half of 1912. The second class speculated in pig breeding.

Contrary to the statements he had heard, he believed that pigs were dear in 1912; moreover food was plentiful and by no means expensive. The figures sent to him as applying to Macroom fair he considered fairly high for pork as compared with 1911, and reasonable as regards meal. He did not agree that farmers found it unprofitable to keep their sows in the end of 1911 and commencement of the following year, or that there was a scarcity of pork at the end of 1912. The high prices at the end of 1912 were due to a decrease in the number of pigs in Denmark. The drop in the number of pigs in 1913 was an ordinary one. The drop in the number in 1914 was extraordinary.

There would always be fluctuations. When meal is dear and pork cheap there would, of course, be a reduction. If the sows were sent to the boar in January, 1912, it would be a year before their stock would be marketed, but the young pigs would be in the country in June and show in the statistics.

Mr. Gennor pointed out that the statistics showed that the number of pigs had fallen off from 1911. If breeding stock were killed off it would take twelve months to show it, viz., at the end of 1912 and beginning of 1913. Meal was then high and pork low.

Mr. Slattery agreed, but stated that the scarcity of fat pigs was felt most from April, 1913, to May, 1914. The farmer who worked up to his full house-room could not in 1912 sell his cattle and there was no place for pigs, but he was able to dispose of his sow at a poor price, and 35d. so.

The second class of farmers he referred to were speculative. They increase the number of their sows or reduce them when the outlook is favourable or unfavourable. They sell the bonham at ten or twelve weeks old. Owing to the bad harvest prospects in 1913 these men calculated on poor prices for pigs and reduced the number of their sows.

His experience was that it is the farmer who usually keeps pigs, knows his business as against the farmer who looks for information. He would like to see small holders in rural districts generally in a position to keep sows. As an encouragement to them to do so and as an example in the neighbourhood he suggested that the Department facilitate the erection of a suitable piggery and supply a sow in young from one of their experimental stations to small holders in a number of districts. He agreed that the difficulty of getting milk might be an obstacle. In most cases, however, it might be available at certain periods of the year, or a substitute may be found such as oatmeal.

Whilst it might be better for the labourer as at present to purchase stores and leave it to the farmer to breed, he had sometimes to pay too much for his pig. Of course this would be remedied when the supply of breeding stock came up to the normal. Owing perhaps to the labour difficulty the conditions in Limerick were perhaps the reverse of the ordinary, and it was the small holder and not the large farmer who bred pigs.

The price and available quantity of potatoes and Indian meal and the current price of pork affected to a great measure the price of bonhams and stores. His point, however, was that if the pigs are available they would be fed. He would offer no suggestions on the results of the feeding experiments referred to on the production of a certain quantity of pork from a definite weight of meal. In regard to the figures submitted by Mr. Slattery of Oakpark he considered that if the bonham had been bred by the feeder the profit would have been 15/- extra or 30/- in all.

The quality of the pigs in the country is at present excellent, and he would be inclined to maintain this rather than to experiment with a view to improving

it. New blood might, however, be introduced now and again, though he understood this was being done.

To encourage the further production of pigs he suggested winter dairying, more tillage, and the erection of suitable houses for pigs and pig feeding. In some of the dairying districts pigs are fed on milk, and when it is no longer available the pigs disappear. There was also an idea that pigs could not be cured in summer. When there is tillage then would also be pigs. He would like to see better houses with both the farmers and labourers, as in the spring he got a number of pigs suffering from rheumatism.

More pigs would certainly be kept in Tralee but for the operation of the sanitary laws, but he had no recollection of any large number being fed in the town at any time. Any decrease was counteracted by the extra numbers kept in rural districts, and he did not think that these laws affected the supply over the country generally. People in the towns did not breed pigs, but fattened only.

Some proper authority should look after the pig fairs in the West of Ireland and in the country generally. In the west they are held at any hour, and sellers bring in pigs at all times of the day and night. In Kerry they had the fairs commencing at 8 or 9 a.m. This gave rise to the idea that there was a combination amongst buyers, but the rule was made to enable farmers to leave home at a reasonable hour, and with the back opening at ten o'clock there was no bother. Farmers are quite aware of the regulation here and the reason for it, but the fairs in the west were a perfect nuisance to the towns and to everyone. No regard was paid to dates and only two weeks in the month appeared to be recognized, so that there was a constant clashing; buyers could not attend them all, with the result that there were frequent plots and drops in prices. Frequently the holding of several fairs together had reduced prices in England and buyers had to purchase to meet falling markets.

In the middle of the month there is usually a rise for the reason that pigs cannot be so easily owing to the scarcity of fairs. Where necessary, legislation should be secured to enable shorter fairs to be re-arranged. It is in the interest of the bacon curers to have as many pigs in the country as possible, but the above mentioned conditions meant a loss and discouragement to sellers.

He protested strongly against the statement that there was a combination amongst the merchants. This was quite impossible in present conditions. Each curer worked independently and they were all competing with one another. If one merchant gave 1/- more than the others, the others must raise their prices or do without their supplies. Very often pigs were bought dearer than the price quoted. The same remarks applied as regards the sale of bacon. The quotations for bacon in the different centres in England were usually the same, but it would not be a fair deduction that the prices of bacon are regulated by the English importers. The fluctuations are more violent in the prices for bacon than in the prices for pigs. The prices of Irish pigs and bacon are regulated by the supplies of provisions coming into the English markets.

His buyers purchased on their own responsibility. When he expected prices to go up he might inform them accordingly. He went to the markets himself and had perhaps twenty men with him. He did not know what each paid for his pigs; they were operating in the open market, buying absolutely on their own judgment, and he paid them according to scale test. The scales belonged to the local authority in some cases, in others to private individuals. His firm bought by live weight, by hand, and on the scales. In addition they had always the competition of the shippers for heavy pigs, and also for sidebills when they wanted these for the fresh pork trade in the English cities.

If it were not for the fact that the grades are rigidly adhered to Irish bacon could not hold its position on the market. The curers wanted to make scales give them the weights required. It might be possible, as suggested, to have a sliding scale of 7 instead of 14 lb.; but he considered that dividing the

TRALEE, 21st November, 1914.

Mr. Denis Slattery—continued.

Mr. Denis Slattery—continued.

weight was only dividing the guarantee. He often had to do this at present when governed by circumstances; and he often took off a lb. in order to be able to allow top price. His present cut was 3/- per cwt. for 1.8.1 and 5/- per cwt. for 1.3.15; and he agreed that this gave the farmer a smaller return for 1.8.15 than for 1.3.8. It was not practicable to remove any portion of the meat with a view to bringing the side of pork within the weight.

In summer pigs are light and people are looking for fat bacon. In the winter there is plenty of food in the country and light bacon is called for. His grades were usually 10 lb. in the bacon, corresponding to 14 lb. live weight.

His own view was that a sliding scale would not do the trade any good. It would be passing a promise upon the heavy pig. Though he recognized there was a difference of opinion on the point, he thought that when pigs went to 1.3.0 they were inclined to fatten better and feeders kept them on. He could, of course, sell overweighted but the price of the bacon would be less. Very often he sent these pigs alive to the English markets.

He saw no objection to the suggestion of Mr. Slattery of Clonsilla that prices should be published, but he did not imagine that it would be of any advantage, as it would scarcely be considered unreasonable in face of keen competition if unreliable information was given.

## SEVENTH PUBLIC SITTING.

MONDAY, 30TH NOVEMBER, 1914.

AT 11.30 O'CLOCK, A.M.

At the Father Matthew Hall, Athlone.

## PRESENT:

Mr. JAMES S. GORDON, B.Sc. (Chairman)

Mr. R. N. BORN.

Mr. PATRICK CLOSE.

Mr. J. WALLINGTON, J.P.

Mr. O. W. H. ROBINSON, B.A.

Mr. EDWARD HAYDEN, Ballymacauley, Roscommon.

Mr. Edward Hayden—continued.

Attributed the shrinkage of pigs in 1913 to the large number of migrants who had taken up new holdings and who had given up pig feeding for a year or two until they got settled in their new holdings; also to pig buyers bringing down the price of pigs suddenly at the least excuse. He was referring to the district between Castlebar and Roscommon, which was an extensive area. The big farms, on which, however, few pigs were kept, had been split up, and there were hundreds of migrants brought in by the Congested Districts Board. These people formerly fed a large number of pigs, but had no feeding for them for a year or two when changed. The Congested Districts Board built new houses for the migrants, a proportion of the capital value of the buildings being charged in the rent of the holdings; but pig houses were not provided, only a big shed, which the migrant divided up as he wished. He considered that an economical model piggery should be put up, with concrete floors and a handy way of feeding; say one or two in a parish, so that the farmers who were anxious to do so might have an example.

The conditions he related to applied generally to the West, but constituted a temporary disadvantage only. He believed that when settled these people would go in for more pigs. Other causes were, he believed, feeding as many pigs as formerly. Railway strikes and Foot and Mouth restrictions were availed of as excuses for keeping prices of pigs unnecessarily low, and farmers were discouraged by the irregularity in prices; they did not like to bring pigs back from the fair. If pigs are not sold, they are fed on at a loss, and, besides, the feeder is prevented from buying a new batch to replace them. Pigs were usually sold by hand to dealers who took them to the bacon factories. When pork was getting up, the price for pigs remained low, and he blamed the buyers for this. He was not convinced that the influence which the trade on the other side exercised on the market, and, of course, he could not hold the Irish buyers responsible for fluctuations on that account.

As well as the fluctuations in the price of pork, the cost of feeding stuffs was often a deterrent to keeping pigs. Many people were turning their attention to calf rearing, but this did not apply to the same extent to the migrants, though when the latter came on to better land they had more facilities for raising cattle. Whilst pigs had to be sold when ready for the market, calves or steers could be held over.

Increased tillage would mean an increase in pig feeding. He did not consider, however, that the potato crop affected the actual number kept; a good crop just tempted people to fatten longer. These would be big heavy animals, and would be sold by hand. Potatoes and Indian meal were the chief foods. Late crushed oats and rye were being used instead of Indian meal, but there was a scarcity of meal. It was usual when the supply of potatoes ran out to sell the pig; the same happened with the price of Indian meal increased.

The daughters of small farmers had no objection to pig feeding, but they find calf rearing easier. They would, however, take up whatever paid best. A fair number of cows are kept, but the butter is not usually sold.

The premium bears had considerably improved the breed, and farmers should be encouraged also to keep pure bred sows. He liked also the cross from the black boar, but the price given for it was not so good, as dealers bought the white pigs first. The objection was more to the all black; there did not appear to be an objection to a small trace of black; the cross with the black was saddled, and this was not so much objected to.

In his district there was a sufficiency of boars to supply all needs. From the farmer's point of view the cross with the black is the most thrifty animal. He suggested pure bred sows because he believed that, mated with the premium boar, the improvement would be greater by having all the animals pure bred. He

ATHLONE, 20th November, 1914.

Mr. Edward Hayles—continued.

had no personal experience of this being so; but he had seen the pure bred animals and thought they were better than the ordinary stock. He believed farmers would be willing to buy them; and he wished to see an extension of the system of selling young sows from the Department's farms. As a result of the continuous introduction of pure bred sows the stock in his district was now practically pure bred, and, of course, if this continued, they would all be pure bred after a time.

More wheat was being sown in his district, but there was no mill for grinding or crushing the corn. At present a barrel of wheat had to be sent to Clara; twelve stones of flour were returned, without any bran or pollard; carriage is paid forward, there was no charge for grinding, and the flour was sent back free. Farmers did not, however, consider that they got a proper return. There was a mill at Castlema which ground for pig feeding, but did not make flour; there were others at Boyle and Lanchester. One shilling per barrel was usually charged for crushing a sack of corn. In districts where there were a number of migrants some of the farmers should be got to combine and get a mill. He knew of some instances where this had been done, and such people should now be induced to get a crusher. He suggested an oil engine, with a good mill to crush for feeding purposes.

There is a good deal of rye grown on the moory land and used for poultry and pig feeding. Where it could not be ground it was boiled and used for pig feeding. All his own pigs were fed on cooked food, Indian meal or crushed oats being given raw through boiled potatoes or turnips; but the meal was not given until the animals were about to be fattened or finished.

MR. THOS. B. HIBBETT, J.P., Vice-President,  
Galway Farmers' Association, Kilsconell,  
Ballinasloe.

Stated that though he had experience of the feeding of pigs all his life, he had more of a general than personal knowledge of the subject.

The Foot and Mouth restrictions of 1912 and 1913 rendered pigs unsaleable except at from 25 to 40 per cent. below their value, and in any case 10 per cent. under the cost of feeding. This affected the heavier animals more particularly. Merchants took advantage of the situation, and lowered prices for suitable pigs; the consequence was that farmers limited the numbers which they usually kept.

There were two sets of buyers—the one who bought for home-curing, and the exporter. The latter took the heavier and occasionally light pigs.

He submitted the following figures as to the price of American green bacon:—

In June, 1912, medium weight was 52s. and 53s. for 28 to 35 lb. long clear sides. He had not the home prices. In November, 1912, the price went up to 75s. At that time Irish pork was 53s., and pigs were coming out for sale after the autumn feeding. His figures for American bacon were taken from the price paid in Liverpool. Pigs then dropped to a disastrous price. Irish pigs could not go over to England; American bacon was raised in London, but the price did not go up here. He was not in a position to furnish detailed figures to show that the prices given by home curers as influenced by foreign competition were irregular. He understood that the American meat did not rule the market price, but at the same time a large influx would have some effect.

Nearly all the bacon sold in his district was American. He considered that the price of pork should bear a certain proportion to the price of bacon in London, but he had formed no opinion as to what the relative figures should be.

Mr. THOS. B. HIBBETT, J.P.—continued.

Pig feeding was not carried on so extensively as in former years owing to the uncertainty of prices; and during the crises referred to he considered that the Irish curers did not adopt a businesslike attitude in dealing with the farmer. The current price of pork is not so much in the feeder's view as the price realised in the far or market for the pig, though, of course, the former ruled the latter.

Buyers had a fixed price when they came to fairs. They do their best, however, for their employers by purchasing cheaper whenever they could; they had an understanding to buy as cheaply as they could. At the same time, when one buyer went to a certain price the others had to follow. The competition of the shippers was also a factor; but they had the market for heavy pigs practically to themselves, the competition for the suitable animal being mainly confined to the curers. Buyers often held back for part of a day until sellers got discouraged and were willing to take lower prices.

He objected to the system of cutting; and the seller of overweight pigs was at the mercy of the merchant, as the shipper was not always available to take this class of animal. If the curer could give a little more encouragement and adhere to a fixed honest price, it would be a great inducement to feeders. At present it is a trying business, and farmers who could do without pigs would probably be as well to get out of them. He realised, of course, that the merchants had their own difficulties and markets to contend with. It was necessary to educate the farmer to the fact that a certain weight of pig always commanded the best price, but he believed that the curer should be able to deal with heavier pigs for home consumption. A very fat pig ought at least to be as valuable for consumption in this country as American bacon. If the people at home could be trained to this, the American bacon here would soon be displaced. At present there was too much money going outside far bacon that could be produced in this country. The curer required generally to get into closer touch with feeders. There should be less mystery about their prices, which should be more even. Quantity and finish should receive more consideration, and less rigidity observed as regards the amount of under or overweight. He thought that the purchase of light lean stores in competition with the best feeders indicated that Irish curers were mixing their meat. When there was a strong demand many unfinished pigs are parted with. If the curer buys these, it should not improve his reputation.

A plentiful supply of potatoes leads to more pig breeding and more and better fattening. The price of bought-in feeding meal such as Indian meal and pollard, even though looked upon as dear, were of secondary importance when there was a good potato crop. He agreed, however, that the high price of meal and low price of pork in the end of 1911 and beginning of 1912 caused many people to get out of pig raising. When potatoes were plentiful, they constituted the bulk of the feeding, a little animal being used to finish. This was the system preferred by those who killed for home consumption.

More pigs were fed north of Athlone than elsewhere owing to the large proportion of tillage. The potatoes were rarely sold except for local requirements, the demand being limited, except in springtime for seed. The price was usually 4d. to 4½d. per stone, and if pigs made upwards of 30s., they could be profitably fed at this rate. Some potatoes made better feeding than others. He could not realise that one stone of meal was equal to four stone of potatoes.

There was a dearth of labour in his part of the country, which affected the large farmer. Servants did not like to feed pigs; were it not for this the large farmer would have more. The small holder raised most of the pigs, and he did the work with his own family, the main question with them being whether it paid. Apart from the shrinkage in 1913, his experience did not go to show that there was any general falling off on account of the labour difficulty. The production of pigs on large holdings had not yet materialised, in fact, it had not commenced on small holdings to the full extent. The industry

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Mr. THOS. B. RUSSELL, J.P.—continued.

could not really be systematically and economically carried on without a substantial increase in tillage.

Only occasionally was a pig house supplied with Rural District Council cottages, and these people do not generally keep pigs. They might do so if they got some encouragement.

In his district the twelve months pig was favoured. They come out for sale from 1st November to end of December at a period when prices are anything but good; at this time they are fed on potatoes. It is the old custom, and is not dying out quick enough, as he believed the better system would be to turn out two sets of pigs of smaller weight in the year: deep-backed, good quality animals, finishing from 14 to 16 stone. They would be more profitable, and the system would be better for the country.

Nine weeks old bonhams would cost from 12s. to 30s. They would bring up to 45s. in the summer. He agreed that if pork could be valued at 4s. or 4s. 6d. per cwt. it would provide a market for home-grown stuff. There was, however, a difficulty in getting the farmer to convert his produce into a marketable commodity like meat. In the absence of compulsion to make the farmer sell and fatten, the only thing was to give him plenty of encouragement. He would offer no suggestion as to how this was to be done: it was a problem for the Department.

Mr. B. P. FITZGERALD, Athlone.

Considered that there was a decided improvement in the district as regards the number of pigs main-

Mr. FITZGERALD—continued.

tained. For the past four years Messrs. Denny had a scale in his yard, and he could speak from experience of the number coming to it. Messrs. O'Mara also had a scale in the town. Since this system was introduced the pigs were bought by live weight. About a hundred pigs a week would come in, and this was probably 25 per cent. more than last year; and the increase was continuous.

He mentioned the name of a feeder near Ballinascree who formerly kept 12 pigs and now had 160.

For the 14 to 15 stone pig the price was 42s., and for Betwicks 38s.

Except those who came to the fairs there were no other dealers buying, as they had not the number of pigs to get since the introduction of the scales. This returned a better price than the dealer.

Pigs were taken on the scales once a week only, both fairs sending a representative on the same day. Messrs. O'Mara's buyer did not know the price until he got it from Messrs. Denny's man; but it was understood that both gave the same price. Pigs were sometimes brought from one scale to another with a view to securing the best return. He had heard complaints from a large feeder that the animals sometimes lost 10 lb. in weight from the time they left his premises until they reached the scales in Athlone, though he gave them no food before leaving.

The sanitary regulations did not interfere in any way with the keeping of pigs in the urban area. There was a regular pig fair, usually on the first Wednesday of the month. The sellers try the dealer first and then the scales. The scales, however, had reduced the importance of the fair.

## EIGHTH PUBLIC SITTING.

TUESDAY, 1st DECEMBER, 1914.

AT 10 O'CLOCK, A.M.

At the Courthouse, Galway.

PRESENT:

Mr. JAMES S. GORDON, B.Sc. (Chairman).

Mr. R. N. BORN.

Mr. PATRICK CLOSE.

Mr. J. WELLINGTON, J.P.

Mr. O. W. H. ROBERTSON, J.P.

Mr. MARTIN HALLINAN, Craughwell, Loughrea, Co. Galway.

Mr. MARTIN HALLINAN—continued.

Attributed the decrease in 1913 to the fall in the price of pork and the small crop of potatoes in the previous year. In consequence there was a drop in the price of bonhams owing to the few people in the autumn of 1913 requiring them; in fact, bonhams were selling for practically nothing then, and breeding stock was killed off. Bonhams had since increased in number and price, and breeders realised since that they had made a mistake in getting out of sows.

In his district meal was a secondary consideration, and the range in prices quoted to him would not affect the situation. People calculated mainly upon potatoes, and the number of pigs to be kept would be regulated by the home-grown produce. He believed that where all the feeding stuffs had to be bought there would be no profit. Their position in the West as regards dependence on the price of meal was quite different from the rest of Ireland. Their own staff was ground in two local mills. Oats, barley, and wheat were ground for pig feeding more or less irrespective of market value, though this might not be done on account of the high prices for corn prevailing this season. It was not the practice to sell potatoes; when, however, this happened the

price was about 6d. a stone, but the market was extremely limited. At the same time, potatoes were not sown to the extent they ought to be.

Pigs were usually fed on potatoes, turnips, some bran and pollard. The younger animals would be started on a little Indian meal porridge and afterwards get some potatoes and pollard. The potatoes and Indian meal were always carefully cooked, the bran and pollard being mixed in raw. The turnips or yellow mangels were given as a condiment. The scarcity of food in his district created a difficulty as regards the cooking.

He had no experience of, nor was he conversant with, the system of feeding on raw foods or the equivalent returns to be obtained from the use of different foods. If he was convinced that he would get as good results from this system as from cooked food, he would change his present practice. Before making a change, however, he would have to have a personal demonstration of the advantages to be derived from the use of raw Indian meal. He would probably be willing to undertake such an experiment if invited to do so by the County Agricultural Instructor.

There were no creameries in the district. New milk was available, except occasionally in the spring,

GALWAY, 1st December, 1914.

Mr. Martin Ballless—continued.

Mr. E. GALLAGHER, Senior Agricultural Inspector for Connanght.

for young pigs. When it is scarce, a sort of gruel is made with flour. So far as possible, however, it is arranged that bonhams will not come in the winter. A ten to twelve weeks old bonham would at present be worth 4s.

His experience as regards breeds was that the Large Black or the cross from the Black and White Yorkshires bore gave the best results. The latter cross produced a spotted animal. The bonhams with a black belt, or "saddle," lead all along. They were thrifty pigs, the sow giving a litter of from 12 to 16, and was a good nurse. This particular class of animal was not only not objected to by the curers, but was the first bought. The pure blacks were scarce, but even these were freely taken by shippers. In some cases the pigs were fed to 4 cwt. The premiums hours were satisfactory, and were leaving good progeny, as were also the ordinary ones in the district.

His own practice was to breed the bonhams and fatten a certain number. He usually made them up to 16 stone live weight, and sent them to the scales or on to Limerick. Pigs could be raised to 2 cwt. in six months, and if well cared for two lots could be finished in the year. He believed this was the best practice. People, however, had different views as to whether it was more profitable to sell at 16 stone or to fatten longer. The practice was to buy the bonham in February or March and not to sell until December, the pig being then nearly twelve months old. A pig 1½ cwt. in September would be 2½ cwt. in December.

The price for 4 cwt. live weight would be about 38s. to 40s., and for 2 cwt. about 46s. to 48s. There were, however, great fluctuations. The farmer was rarely able to tell the weight of an old pig. When he sent his animal to be sold over the scales he had no reason for not having confidence in the return. He believed that generally the price was considered satisfactory. There were three outlets—the live scale, the Limerick dead weight market, and the skipper. Both the curers and shippers competed in the fair. The system by which it was possible to send sizeable pigs direct to the curer was a great convenience.

He would not say that there was any general dislike on the part of people to feed pigs; he thought that the industry was carried on to the same extent as ever, with rare exceptions due to the scarcity of fuel for cooking, labour, etc. He believed that the business was a source of considerable profit.

He was dealing principally with a district comprised of small farmers; these were the people who principally kept pigs. Some of the large farmers also did so, but their employees had an all-round objection to the work. It was his experience that the farmer and his family had to do it. The small farmer without a family was in an awkward position. Some greater inducement was required to keep young people on the farm. The labour objected to was not cooking.

Poultry were kept to a greater extent, but were not taking the place of pigs.

He believed there must be a considerable difference between the results obtained in a substantial pig-house with up-to-date appliances, like those at Anthony Agricultural Station, and that under the conditions which prevailed in his district. A substantial impetus would be given to the raising of pigs if better houses were provided. He suggested that loans for, say, £20 or £30, or the minimum required for the erection of a suitable building, should be made to farmers at a reasonable rate of interest to enable them to put up proper houses and cooking accommodation. A planned specification might be supplied and the building erected by the borrower, with the help of a handy man, under the supervision of the Department's officers. At present there was entirely too much red tape in regard to loans given by the Board of Works.

The manure from pigs was very valuable for tillage.

So far as the Western Counties are concerned, Mr. Gallagher attributed any marked shrinkage of expenses in the numbers of pigs kept by farmers from year to year to—

- (1) The yield of the potato crop;
- (2) The prices obtained for pork;
- (3) The cost of purchased food stuffs, principally maize.

Outbreaks of disease, bad harvests, or fluctuations in prices might also have some influence in this direction from time to time.

Though of late years the tendency had been to use more maize and other "outside" products, the potato still reigned as the most important item in the food ration of the swine produced in the West. A considerable proportion of the potatoes grown in the province was used for pig feeding purposes, and he frequently had direct testimony to the effect that the number of pigs to be fattened by small farmers in a particular season depended upon the "return" obtained from their potatoes. In this connection he directed special attention to the striking relationship between the comparatively poor potato crop of 1912 and the serious shrinkage of pigs in the West in 1913.

While the produce of 117,168 acres devoted to potatoes in Connanght in 1911, at the rate of 6·4 tons per acre, gave a total for the province of 754,409 tons, the yield of 115,453 acres in 1912 was only at the rate of 4·8 tons per acre, or a total of 553,930 tons. The result was a decrease of over 47,000 (from 263,174 in 1912 to 185,366 in 1913) in the pig population of the province. A similar though not so pronounced shrinkage succeeded the poor potato crop of 1904. On both occasions the decreases took place in the face of steadily expanding values.

While the price obtainable for pork considerably influenced the industry as a whole, it had not, in his experience, the same effect in the West as in other parts of the country. He had heard complaints regarding rapid fluctuations, but this was a minor factor only. Even when pork prices are relatively low, the small farmer in the West, provided he has a plentiful supply of potatoes, will make his usual arrangements for the feeding of a certain number of pigs. This is largely due to the fact that, outside a few comparatively small areas, it is not customary to dispose of surplus supplies of potatoes through any other channel. Cooked potatoes, with a liberal sprinkling of Indian meal, is the standard ration for pigs. When potatoes are scarce and meals constitute the staple food, the Indian meal is cooked. Very little bran or pollard is used, Indian meal being the principal bought food.

Only with an intimate local knowledge of the subject is it possible to realise the extent to which potatoes are employed for pig feeding all over the more densely populated districts in the West. Though now rather less so than formerly, the pig feeding industry is, to a large extent, a "seasonal" one, the great majority of the animals being fattened during the late autumn and early winter months. Throughout that period the potato constitutes from two-thirds to three-fourths of the standard ration for pigs. The use of maize meal is also general, but, compared with other parts of the country, is distinctly smaller proportion to potatoes. The same applies to bran, crushed oats, barley meal, and pollard. Though in steadily increasing favour in this respect, the last named is not used to anything like the same extent as in the other provinces. Outside a few cessary districts in Connanght, Sligo, Leitrim, and Londonderry, milk as a food for pigs is, speaking generally, unknown, though a small quantity may be given during the rearing stage.

A shortage of pigs in a particular year leads not only to a reduction in the number of pigs fattened, but to a marked decline in the number of sows kept for breeding purposes, and the result often is a scarcity of stores for feeding in the following season. Consequent upon this, the demand for bonhams becomes so keen that prices run up abnormally—sometimes to a figure that reduces to a very small

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Mr. E. Gallagher—continued.

Mr. E. Gallagher—continued.

margin the profit obtained by the feeder. In this connection it may be noted that so far as the West is concerned not only the price of pork but the cost of purchased feeding stuffs tells more markedly in steady supplies than in almost any other district. Should it happen in a season when potatoes are scarce and dear that pork is selling at a good price and maize and other "shop foods" are reasonably cheap, those in the habit of keeping sows are encouraged to maintain their breeding stock at a normal level in the hope of better prospects next season; whereas with prices of pork tending downwards, and meat and other purchased food stuffs relatively dear, sow owners have nothing like the same inducement to do so. The high prices of hushams would not be a consideration. Hushams were only dear when pork was dear and potatoes plentiful. Compared with the remainder of the country, conditions in the West were very different, and labourers were not in the habit of keeping pigs. They were kept principally by small farmers, and to a limited extent only by large farmers.

Outbreaks of disease occasionally had a depressing effect upon the industry. He knew several districts in which, owing to outbreaks of swine fever, pig-breeding declined very seriously for a time. The results in such cases were, however, merely temporary and local.

In many places the provision made for the housing of pigs leaves much to be desired. It is sometimes imagined that any apology for a shelter is sufficient, whereas it is well known that no farm animal is more sensitive or responsive to special treatment in this direction. Ventilation is frequently neglected, and cleanliness does not always receive the attention it deserves. Ninety per cent. of the losses from disease among pigs could be prevented by the provision of better housing and the exercise of more care in keeping the animals properly bedded and clean. Anything that the Committee can do towards focusing attention on this point cannot fail to be productive of good results.

He had known of cases where much dissatisfaction, not to say imitation, was caused by violent fluctuations in the prices of pork. To the man in the street it is puzzling to understand why sizeable pigs which are selling on a particular date at, say, 56s., should drop within a week or ten days to 46s., 48s., or 50s., thus entailing a reduction in receipts of from 10s. to 15s. per pig. Such fluctuations are not, however, peculiar to the pig trade, and one does not often hear them seriously advanced as tending to discourage farmers from breeding cattle. He was not of opinion, however, that this is a material factor in influencing the number of pigs kept in the country.

So far as his ten years' residence in the province enabled him to determine, he had no hesitation in saying that there is no falling off in pig feeding as compared with former years. Small farmers, who constitute the great bulk of the population, are as keenly interested in, and as eager to carry on, pig feeding as ever; and as there has been a considerable increase in the number of small holdings in Connacht during the past decade, his opinion was that in that province the tendency is not in the direction of a falling off in breeding and feeding, but in the opposite direction. Cwars tend to influence the industry adversely in other parts of the country, such as scarcity of labour and disaffection on the part of employees to engage in pig feeding, do not apply over the greater part of Connacht, where the work is almost entirely done by the farmer and his family.

As to the quality of the pigs produced in the province, his view is that it is distinctly good, and that it has undergone marked improvement during the past fifteen or twenty years. The chief agencies contributing to this were:—

- (1) The Bore Scheme of the Bacon Cwars' Association, the beneficial influence of which is traceable to this day; and,
- (2) The existing Scheme Improvement Scheme of the Department of Agriculture.

By the adoption of what is now so well known as the Department's Premium Bore Scheme it became possible for the whole of the province to take advantage of facilities for the introduction of pure bred boars on terms which placed the animals within easy reach even of the poorest districts. The extent to which these facilities have been availed of, especially in the very poorest districts, has been most gratifying.

The congested areas of the Counties Galway and Mayo are admittedly the poorest, and, agriculturally, the most retrograde of any districts in Ireland. In many respects they are, however, by no means the most backward or least progressive. With the meagre materials, in the form of land and equipment, at their disposal many of the small farmers in these districts have acquitted themselves most creditably in contributing to the general improvement in live stock throughout the country during the past fifteen or twenty years, and in no branch of the industry has their energy or enterprise in this direction been more plainly manifest than in regard to their pigs. The following table would show the number of premium boars kept in the Western Counties from practically the inception of the scheme:—

Year.	Galway.	Lestrin.	Mayo.	Reconcomen.	Sligo.	Total in Province in each year.
1903	10	—	2	10	9	31
1904	4	1	13	2	13	33
1905	24	11	18	14	16	83
1906	36	11	31	24	16	118
1907	36	12	42	36	16	126
1908	35	11	45	32	16	129
1909	41	9	46	24	17	137
1910	47	10	49	24	21	151
1911	48	9	50	24	24	165
1912	52	7	54	27	23	165
1913	53	6	53	30	24	166
1914	54	9	55	29	21	168

In most of the Western Counties the demand for these boars is steadily on the increase. The total for 1914 would have compared still more favourably with previous years were it not that a shortage in the supply of young boars available for premium purposes rendered it impossible for a number of applicants to be provided with approved pigs. Boars are not always available when required, and at other times the conditions are reversed. To maintain a steady

supply, the Department, so far as possible, should arrange to take boars from the congested districts when the demand from other parts of the country is lowest. He rarely marked a boar unless he had an applicant for it. Breeders should contrive any pig they did not believe would pass for a premium. He was satisfied that the price paid by the Department offered a good inducement to breeders to take the risk of keeping pigs as boars to the age of five



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Mr. E. Gallagher—continued.

Mr. E. Gallagher—continued.

months. His only objection to marking boars at three months was that it meant re-inspection and that the animals so marked were not likely to receive the same care from the breeder. It did not follow that a pig which was promising enough to be marked for a Premium at three months would be an equally suitable animal at six. If taken over by the Department at that age the results to the Department would probably not be so good financially, and any loss incurred in this way would result in a diminution of the amount available for lending boars. He was opposed to sending out boars to premium holders until they were six months old. Any person selected to keep a boar could buy it anywhere at any age, and could mark having it passed by the Department. If more funds were available, the numbers of such animals at service throughout the province could be largely and most advantageously increased. The amount allocated by many County Committees to the Baine Scheme did not compare favourably with that devoted to horses and cattle—having regard to the value of the respective industries to the country. In some counties the allocation for boars could certainly not be regarded as equitable.

The members of County Committees were usually the larger farmers, and while quite sympathetic to the swine industry, many of these were more concerned with horses and cattle. The pig industry was mainly dependent upon the smaller holders, and were these more adequately represented on the Committees there would probably be less of an inequality in this respect. In view of present conditions, the Department endeavoured, so far as practicable, to have the benefits of the Scheme diverted to small holders.

Mr. Gannon pointed out that whilst the proportion of premiums to ordinary boars was 1 in 4, the proportion as regards cattle was only about 1 in 24.

Mr. Gallagher, continuing, agreed with Mr. Boyd that with a pig population of 1,400,000, and taking about two-thirds of these as being marketed at six months for, say, 24 each, the total value of the pigs produced in the country would amount to about 11,000,000 per annum.

He had heard no complaints regarding in-breeding so far as the West was concerned. In one or two instances the Limerick houses objected to some pork from the Galway coast on account of its fishy taste.

In the West, as in other parts of the country, divergent views are held on the question of the relative merits of the different breeds. Outside the districts bordering upon Ulster the prevailing type of pig throughout the province is the Large York. Profiting by the extensive introduction of Large York boars, small farmers have now evolved a type of pig that in many places is difficult to distinguish from the pure-bred York. Upon sows possessing such a large infusion of Large York blood it naturally follows that the "improving" influence of a Large York boar is not quite so pronounced as in the earlier days of the use of this breed, and this has latterly led to a demand from some districts for "fresh blood"—in other words, for other breeds. Hence the representations occasionally made on behalf of Large Ulsters and Large Blacks. It is well recognised that crosses between two distinct breeds, or between a pure bred and a cross, are usually more vigorous and frequently more thrifty than members of either parent stock. Many confess that the proper principle for the small farmer to pursue is to keep on producing crosses from well defined types calculated to give the necessary vigour. If there were no consequential defects in the progeny, the argument is one with which it would be difficult to quarrel. But, unfortunately or otherwise, the bacon cures have to be taken into account, and so far as the Southern cures are concerned their attitude towards the Large Ulster and the Large Black is one of uncompromising hostility. Upon these Southern cures the trade in pigs in the West practically depends; and so long as their requirements render it necessary for them to give the preference to pigs of the Large York type, so long will it be to the advantage of the small farmer in the West to produce pigs of this type.

County Committees had, of course, discretion as to the breeds they would subsidise; but, taking the foregoing circumstances into consideration, he invariably recommended them, when asked for advice, to adhere to the Large York boar. They usually did so, though they sometimes asked for Large Ulsters. The West generally was, therefore, not concerned with the trade for which he understood the Large Ulster was specially suitable. At present the number of Large Ulster and Large Black premium boars at service in the five Western counties is infinitesimal, but this was not to be taken as accurately representing the demand for the breeds in question, as were he at liberty to do so he could have trebled or even quadrupled the numbers of Blacks and Ulsters placed. So far as he could gather, Southern cures would not attend markets where pigs of the latter type predominated.

To develop the pig-breeding industry in the West and to maintain the improvement which is at present in progress, he would submit the following suggestions:—

(1) That County Committees of Agriculture should devote more attention to the encouragement of pig-breeding, and allocate a larger proportion of the funds at their disposal to the provision of premium boars.

(2) That at every show subsidised through County Committees prizes should be given in classes for sows in young, or with litters at foot, with a view to encouraging and educating farmers to keeping sows of the most approved type.

(3) That it should be made a condition of the existing Cottage and Farm Prize Scheme that no holding will be eligible to win a prize thereunder unless the judge can certify that a reasonable number of pigs is fed each year, and that suitable accommodation is provided for the animals so kept; and that special prizes be offered in connection with this Scheme for the best designed and best kept piggeries in each district.

Whilst it was within the discretion of Committees to adopt these measures referred to in 1, 2, and 3, the importance of their doing so should be further emphasised by the Department.

(4) That every Agricultural Instructor should carry out in his county or district a systematic series of experiments with a view to demonstrating, on the spot, the most economical and remunerative methods of feeding pigs of different ages, and that he should subsequently utilise the results so obtained for the purpose of instructing farmers how to make the most of the food stuffs usually employed. In the meantime the results of the important experiments on this subject already conducted elsewhere should be widely disseminated.

(5) That in advocating an extension in the area under tillage Instructors should emphasise the importance of making provision for an increase in the production of crops suitable for pig feeding purposes, especially barley. The *Spunt* variety had been found to give a splendid yield on bog land in the West, and its more extended culture would be an important factor in pig feeding.

(6) That every opportunity should be availed of to bring home to farmers the saving that can be effected through feeding raw instead of cooked meal to pigs.

(7) That a steady inflow of fresh blood be constantly and regularly maintained by a further development of the system already adopted by the Department for introducing for the use of leading home breeders high class boars and sows from the other side of the Channel.

(8) That the Department take steps to ensure that only the progeny of high class sows of approved type are selected and located as premium boars. He thought sufficient attention was not at present paid to the individual merits of the sows from which premium boars are bred as regards fecundity and thriftiness. The selections at present made sometimes comprised boars which though themselves up to standard were from a small litter and perhaps very moderate sows.

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Mr. E. Gollagher—continued.

Mr. E. Gollagher—continued.

(9) That owners of pure-bred herds be encouraged to breed high class young sows for sale to small farmers at reasonable prices. The experience of the Athenry Agricultural Station had shown that there was a very large demand for such animals, and that farmers are prepared to pay prices which would enable breeders to go to considerable expense in producing them. He suggested the adoption of a scheme under which a subsidy or bonus of, say, 10s. or £1 per head would be given on the certificate of an Inspector of the Department for pure-bred young sows sold (in pig) for breeding purposes. The sale of such sows could be regulated by supplying them only to applicants approved by County Committees. The latter body should consider whether they or the Department should pay the subsidy.

(10) That the Railway Companies should be induced to carry pure-bred hams (other than those selected for portmanteaus) and sows intended for breeding purposes at substantially lower rates. Within the past eighteen months the M. G. W. R. had doubled their rates for the conveyance of breeding pigs (in crates) by passenger trains, and the increased charge had reacted adversely upon the industry, and heavily handicapped small breeders who were in the habit of

introducing fresh blood through the purchase of young sows. Recently, however, this Company had met the Department very fairly over the carriage of pure-bred hams. He thought it would eventually pay the companies well to facilitate the carriage of all these pure-bred pigs.

(11) That representations should be made to the proper authorities as to the provision of suitable accommodation for pigs in connection with the new standings for migrants and the cottages for labourers which are being erected in such large numbers in many districts in the West. At present pig styres are not included in the original equipment of such holdings, and the attempts made by the occupants to make good the deficiency in this respect are as a rule inadequate and unsatisfactory. The Local Government Board might, if necessary, authorize Rural District Councils to exceed the present maximum cost of these cottages in order to provide this accommodation. He agreed with the suggestion that facilities might be given for the erection of suitable pigsties by means of a special loan to small farmers; ceilings for concrete might also be lent as an inducement to small farmers to undertake the erection of concrete pigsties in districts where suitable gravel was conveniently procurable.

## NINTH PUBLIC SITTING.

WEDNESDAY, 2ND DECEMBER, 1914.

AT 10 O'CLOCK, A.M.

At the Courthouse, Castlebar.

## PRESIDENT:

Mr. JAMES S. GORDON, B.A. (Chairman).

Mr. R. N. BIRD.

Mr. PATRICK CAHILL.

Mr. J. WILLINGTON, F.R.

Mr. G. W. H. BOULSTON, D.A.

Mr. JAMES O'BOYLE, Ten Ros, Killybegs.

Mr. James O'Boyle—continued.

Attributed the reduced number of pigs in 1913 to the shortage of the potato crop as well as the high price of purchased foodstuffs in the previous year, as a result of which many of the breeding stock were disposed of.

There was a serious mortality in his district, more so in some seasons than others. This he believed to be swine fever, though he was not sure whether it was this disease or not. The outbreaks were rarely reported to the police, and this was the position of affairs during his experience. More than the restrictions the people feared the loss; they did not appear to realize that they would receive any compensation. Medicine is sometimes given, but very often the pig is choked. Some years ago a veterinary inspector was in the habit of visiting the fairs, but did not go to farms except when cases were reported. There was a further ailment known as "Diamond" which had the effect of leaving the pigs crippled afterwards.

There is a veterinary dispensary in the district, but he had never heard of anyone bringing their pigs for treatment, though the veterinary surgeon was interested in the matter. Personally he attributed much of the disease to the unsanitary and unsuitable housing, for the reason that most of the farmers he knew who had good accommodation rarely suffered any loss.

If the small farmers could get a loan to enable them to improve the houses many of them would do so. A number would not incur an expenditure of £2 or £3 at present as they did not know the difference between a good and a bad piggy. There was plenty of sand for concrete, and if a scheme were put into

operation for erecting or improving these buildings he considered that the Department's officers should supervise the work.

The cottages provided by the Rural District Councils were supplied with a sort of open shed that could be converted into a pigstie, but the cow was usually put into it, and an adjoining small house used for poultry.

There is a substantial increase in pig feeding in the district. Potatoes were mainly used, and to some extent turnips. Few of the people grow barley, and the amount of oats is also small. Most of the grain is consumed by the horse and by fowl. Potatoes and turnips, and potatoes and Indian meal are the chief ration. The potatoes and turnips are boiled down and mixed with the raw meal, all being then allowed to cool. A bad potato crop meant a poor demand for pigs. When Indian meal is dear farmers are somewhat reluctant to fatten. This happened at the time when potatoes were scarce, and the two factors had the effect of reducing the number of pigs fed. Of course the price of pork was also a consideration.

He believed that the Large White York was the only suitable boar for his district. The Large Black was kept for a time, but there were practically none left now, though the crosses are not quite extinct. The crosses from the black and white was a thrifty animal, but the people are giving them up as they won't be bought. The pork from the black pig was not firm. The dealers do not like them for their cross-channel trade. They preferred the white.

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Mr. James O'Boyle—continued.

Mr. JOHN MORAN, Park, Castlebar.

A larger area under tillage on both large and small holdings and better housing accommodation would increase the number of pigs fattened. Additional tillage would provide more potatoes and grain. A more plentiful supply of milk was also necessary.

The majority of the farms held less than fifty acres; the usual holding averaging about fifteen. The larger farmers complain of the difficulty of getting pigs fed. Men are usually employed, but they do not like the work, especially on Sundays. The fishing industry also drew a number of hands away from the land in seaboard areas.

As a rule every one of the small farmers had pigs and kept a sow, but when prices are unsatisfactory the latter is sold off. The risk of swine fever deterred several of the larger farmers from getting into pigs.

A dead meat market was desirable, but before it was established more tillage was required. The custom of keeping pigs for twelve months would also need to be discontinued. This class of pig would be about 20 stone and make from 45 to 87. These pigs usually ran about from April to November. Sows were also permitted to remain on the grass until within a month of farrowing, and were often allowed to farrow without any assistance. He did not himself believe in interfering with a sow at this time. He favoured the practice of turning out two lots of pigs in the year. He would expect to make 14 cwt. in six months, and this would certainly pay better than the present system prevailing in the Killalea district of feeding pigs for 12 months.

At this time of year pigs are sold at 2 cwt. or 12 to 15 stone dead weight. If light weight pigs were more generally raised the cures might be induced to come for them. The farmer required a considerable amount of education on this point.

Most of the pigs about Killalea were sold by hand, the majority of them going to shippers, except at, say, the fair of Ardara, where there would be keen competition from the cures as well. There was a large number of shippers and they compete against one another. They also frequently come round to the farm, but if the owner is not satisfied with the price offered he sends the pigs to the fair.

In the event of a dead meat market being established proper weighing facilities would be required. The curer had no scales, but there is an ordinary public scale in the town. By a dead meat market he meant that the pigs should be sold at the houses of the farmers or some centre in the locality, and killed there, but some accommodation would be necessary for hanging up the carcasses. In the absence of tillage, however, he would not support this business. At present Ennistown would be the nearest dead meat market, and he thought the railway facilities would be sufficient for sending carcasses there. He agreed that a rapid train service was essential.

His main idea was to provide another outlet for pork. From what he had heard of it he believed the dead meat system gave a more satisfactory return than was obtainable at present. Ballyvaughan was one of the best districts in the west for pigs, but there is frequently very little competition and shippers pay what they like.

There is a scarcity of milk in the district. Some of the farmers having five or six cows never have a cow, and frequently have to do without milk. The land on these farms was fair, but was not always properly treated. Other farmers have no milk for some months before the cow calves.

Some of the difficulty in this respect was attributable to the large infusion of Aberdeen Angus cattle. A few dairying bulls would be an advantage. The Hereford and A.A. were now usually applied for as premium animals. The calves are disposed of at from ten months old, but unless by a good bull were not a very saleable animal.

There was a considerable increase in the number of poultry kept in the district and a big demand for the produce; they may have taken the place of the pig to a slight extent. Few labourers in the Rural Council cottages keep pigs. Many more could readily do so. He suggested a scheme of loans to poorer farmers along the seaboard of North Mayo to enable them to erect suitable piggeries.

Believed that the principal causes of the decrease in the number of pigs in recent years were (1) the scarcity of labour on the larger holdings, and (2) the restrictions consequent upon outbreaks of swine fever.

Neither permanent nor casual labour was obtainable in his district and the farmer is obliged to get out of tillage, without which pig feeding could not pay. It was difficult to hire a man for the whole year; he did not like to be bound for more than a week. Most of them are migratory labourers. The local wages would be 5/- and board; in England the same men were able to make up to 50/- (without board) on piece work. Their families do most of the home farm work and mind the pigs; pigs are mainly kept by small holders. Even some of the few labourers' cottages in Castlebar Union are given to migratory labourers, and he did not think this was right. He believed that many of those who go to the other side could find plenty of work locally, and where the land was better divided up there should be work for all.

The farmer will suffer the loss of his pigs rather than put up with the existing stringent regulations enforced in swine fever cases, viz., the absolute of sound as well as infected animals, the small compensation given and the declaration of an infected area. Not alone is the R.I.C. not made aware of these cases, but the man's next door neighbour is often ignorant of the existence of disease, which is consequently allowed to run its course unchecked and to spread infection. The disease, however, is not so prevalent as formerly and there is not the same danger of infection. At the same time he wished to make it clear that the disease to which he was referring might not be swine fever. He had not known for some time of any cases where pigs were slaughtered on account of swine fever.

The compensation allowed was quite inadequate as regards pure bred animals. The farmer required much more education on the necessity for restrictions as the belief was that at present the restrictions defeated their own object. The pigs that recovered were uninfected; and though he admitted that half the value was reasonable for a pig that would probably die, he suggested that the maximum compensation be given in all cases, even where the disease actually existed, but with this exception he did not consider it desirable to relax the present restrictions. Pigs might perhaps be allowed into the piggery again after two months.

He kept four to six boars, of different sizes, all pure bred and some of them premium animals. He had been engaged in this work for nearly twenty years, and had observed a great improvement in the quality of the pigs. He was also in a position to know that pig rearing was on the increase in his district. The number of sows coming to his yard were:—

From 1st January to 30th November, 1913—581	
Do., do., 1912—523	
Do., do., 1914—563	

These came from within a radius of three miles, and he never had a case of swine fever introduced in this way.

There is not now a coloured pig in the district, as this class of animal could not be sold. The Large White York was the only one favoured.

He did not consider that it was profitable to keep a premium boar, though he knew there was a good demand for them, but the attraction was the easy terms on which the animal could be obtained. If the inspection as to the way in which these animals are kept were more rapid many of the breeders would not be able to keep the boars under existing conditions. Of course the man who was in the habit of keeping boars would treat them better. His own experience was that if the boar was not well fed the litters would be small, but the main point was to keep the animal active. He did not consider it was necessary to adhere to a particular strain, but a good sow was desirable.

His charge was 2/6 for non-premium boars. Even though allowed to charge 3/- for a premium boar he believed that the premium boar would still be given the preference, as people were sufficiently alive to

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Mr. John Moran—continued.

their own interests in this connection. Undoubtedly in some backward districts the 1½ fee would bring some to the good book.

The price of pork or of bought-in feeding stuffs had comparatively little influence in his part of the country. A bad crop of potatoes meant a decrease in the number of pigs. When potatoes were plentiful the pig was the market for them. He concurred in the suggestion that it might be well to have a few experiments to test the relative value of foods for pigs. He was doubtful that private farmers in his district could be induced to take up this work; and it should be remembered that the current price of pork was not altogether relevant to the industry in the west. The higher price of pork merely counterbalanced the extra cost of the bonham.

To increase the number of pigs fattened it is necessary to induce large farmers to fill more, and to create a co-operative system by which small farmers could procure feeding stuffs such as maize at a low price, especially in seasons in which the potato crop might be inferior. His view was to reduce the price of feeding stuffs as far as possible for people who required small quantities only. This, however, was entirely a matter for the people of a particular locality. There were eight or ten mills in his district; they usually dealt with eaten meal; there was also good competition in the sale of feeding stuffs, and on reconsideration of the matter he thought that perhaps Indian meal could not be obtained on better terms than at present.

He did not consider that the £3 paid for premium boars was sufficient when the price of pork was high. He usually selected his best animals before offering them to the Department; and he was usually able to dispose to persons outside the district of any boars not taken by the Department. There was little difference at six months old between the price obtained for the premium boar and the pork pig. The earlier the pig could be marketed the better it was likely to thrive. A good deal of house room was taken up when a number of boars were kept on. He admitted that the fact of being able to sell boars to the Department was a good advertisement for the breeder.

The housing in the Castlebar district is fairly good. Proper houses were essential for profitable pig rearing and feeding.

Mr. THOMAS GILLESPIE, Castlebar.

Stated that he was Secretary of the Castlebar Co-operative Society, incorporated last year, which had for its object the creation of a bacon curing factory in the town.

He was not himself a breeder or feeder of pigs. His observation, however, led him to believe that the reason for the decrease in the west was the difficulty in marketing and fluctuations in price. At the same time he acknowledged that the market prices did not influence the number of pigs maintained in that part of the country.

There are no regulations governing sales in western towns, so that all the pigs are frequently sold the day before that advertised. Buyers also go out through the country and foreclose the sale, and pigs are sometimes bought by hand at night. To meet present conditions sellers often have to travel at night and remain in the fair until buyers choose to come out. The buyers all usually stop in the one hotel, and it is believed that they arrange prices beforehand.

The weightbridge is not used, and the pig is not bought by weight. There is an alternative to the dealer; he knows the market and can tell at once the weight and value of the pig better than the farmer. He contended that pigs were bought unfairly. He admitted that he was not content with the position of dead to live weight generally allowed or the price which should be paid for either class of pork. He was until to-day not aware that the representatives of the merchants delayed buying until a serious hour in the morning in order to avoid bring-

Mr. Thomas Gillespie—continued.

ing in the sellers before that time and to give everyone a chance of obtaining the market quotations; but this practice did not obtain in Castlebar or district.

He acknowledged that there was considerable competition, but at other times there were serious complaints. He thought, however, the same might be said of other classes of stock, but there was no competition in the buying of cattle.

His belief was that by increasing the number of factories throughout the country there would be greater competition and the industry would be encouraged. There were 300 factories in Denmark, and in his opinion these were responsible for the extension of the bacon trade there. He had not studied the subject sufficiently to ascertain whether the conditions of agriculture and stock raising and the possibilities of Ireland and Denmark were different. This might perhaps be the reason for the comparatively small number of pigs kept here. He had seen the figures, and he was surprised to learn now that instead of there being a decrease in the pig industry in this country in 1914 there was a substantial increase.

The promoters of the Castlebar bacon factory had taken into their calculations the facilities for transport, the current price of pork, and buying by dead weight. The idea in starting the factory was that each shareholder should guarantee to bring in a certain number of pigs annually. 11,000 had already been guaranteed for five years. His society, however, were crippled for want of capital, and he would be glad to know whether the Department could afford these any assistance.

He had listened to the statement that in Ireland there were bacon curers who had spent large sums of money in starting successful establishments on their own initiative, and that these merchants would not unreasonably object to pay taxes to enable other people to compete with them in their trade; but he could not agree that the Government were not justified in subsidising co-operative societies to compete against these traders. He did not consider that a limited number of individuals should be allowed to create a monopoly. He had not taken into consideration the fact that the principle of subsidising might be indefinitely extended. In support of his application, however, he instanced the assistance that had been afforded by means of a loan from the Congested Districts Board to the Foxford, Co. Mayo, Woolen Mills. His society had approached that Board for similar aid, but had got a refusal. He had also previously applied to the Department and he was informed that they had no power to give financial aid but they promised to afford expert advice. A co-operative society should, he believed, be confined to farmers, but they had not much money to put into it. He was at present looking for money in England.

Mr. JOSEPH F. QUINN, Castlebar.

Was a farmer's son and at present employed as a journalist in Castlebar, and was interested in the proposed bacon factory and in the industry generally.

Before being migrated to their new holdings many of the people were obliged to rely on pig feeding, but now with better land they were inclined to turn their attention more to cattle, the returns from which in recent years had much improved. It was a serious oversight, however, that in the building of thousands of new houses under the Congested Districts Board and the Labourers' Acts no accommodation was provided for pigs. The result was that until they were in a position to put up some sort of housing the new holders were obliged to give up the industry to which they had been accustomed. This also reduced the number of sows, with the result that the price of bonhams went beyond what many of the poorer classes of the people were prepared to pay. Farmers who continued the rearing were those who had made most out of the business, and he would like to see this side of it further encouraged. He was told that breeding was now on the increase, but more good boars were required.

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Mr. Joseph F. Quinn—continued.

Mr. P. F. Tashy—continued.

The fluctuations in and increased cost of feeding stuffs, to which the recent shrinkage was in part attributable, could be remedied by the growing of more grain and green crops. To make the industry profitable all the food should be grown on the farm. A firm in Castlebar had recently provided facilities for growing green for feeding purposes, and this was a great boon. He might mention that he had but a short time ago bought oats in the town at 10½d, while corned was selling at 3½ a stone. There was a fair demand for potatoes both for local consumption and shipping.

He thought the fact that the farmer was paying 10d. for American and up to 1½ for Irish bacon while he was getting 6d. only for his pork proved that he was not receiving the full market value of his pig. He was informed that the Castlebar Auction Committee when they could not get their contractors to supply bacon at the outbreak of the war purchased pigs in the open market and killed and cured them. He understood they saved 22½ cent. on the meat and had the best class of home cured bacon at less than 6d. lb. Farmers in this country required to be educated to the economic advantage of raising and using home cured bacon.

Castlebar was a good district for keeping pigs and feeders were satisfied that under existing conditions they were getting the best price obtainable. To encourage the killing of pigs at home, however, and secure the highest possible return he favoured the establishment of a co-operative bacon factory. The project in Castlebar was supported by the farmers for this reason, but was stopped by the outbreak of the war. He regretted that the Department had not seen their way to give some assistance.

Pigs were now kept under more sanitary conditions generally. This also applied to the industry in towns, where he did not believe there was any appreciable decrease on account of the sanitary regulations. The Urban Councils allowed every possible latitude and any recommendations made were usually attended to. Any falling off in the urban areas would probably be due to the price of hockhams.

If accommodation were provided in connection with houses immediately outside the towns it would help to extend the industry. The Congested Districts Board should also include pig sties with their cow buildings, and the Local Government Board should see that similar accommodation is provided at the Rural Council's cottages. The latter bodies too frequently overlooked this and just follow the specification sent down to them. If some encouragement were given he believed that suitable houses could readily be put up at a small cost. A small grant of £2 or £3 would induce the farmer to spend several times that amount.

Mr. P. F. TUOHY, Vice-Chairman, Ballyshellick Parish Committee.

Stated that the Committee had a certain grant from the Congested Districts Board out of which they could give what assistance they pleased to persons other than those provided with new holdings whose valuations do not exceed £10. All applications are dealt with by the Committee, and the work done to the satisfaction of their Inspector. The work usually undertaken in the erection of a shed with a pigsty at the end for which a grant of £8 is made: £2 or £3 being given for a pig house alone, and this must be built at a certain distance from the house. In the course of time a considerable number of improved houses would be erected under this scheme. At present it was certainly producing good results over the West.

There was a class of Indian meal on the market from which portion of the oil had been extracted. It was sold at a somewhat cheap rate, but pigs did not thrive on it. He considered that it should be an offence to sell this meal without its true value being stated.

The numerous fluctuations in prices frequently caused much demoralisation.

His experience was that the cross between the Large Black and the Large York or Ulster comes to maturity quicker, and there is a great demand for them. They are 1½ cwt. in about five months. The agents from Limerick do not object to them.

He had been getting up to £2 for 8 weeks old hockhams. They were now down to a little over £1.

Mr. A. C. LARMINE, J.P., Castlebar.

Stated he had been concerned in the promoting of a bacon factory in Castlebar and was conversant with the conditions in Denmark.

The fall in prices about 1911 he would consider mainly responsible for the subsequent decrease in the number of pigs. He thought the industry was now carried on more extensively than ever, and that it would tend to develop still further.

He was glad to observe that the old custom of keeping pigs for 12 months was giving way to the practice of selling two or three lots in the year.

He did not consider that the quantity of potatoes in any one year had much effect on the number of pigs kept as the supply came in too late, though it was a factor in the profits. A plentiful crop, however, created a greater inquiry for pigs for the following year. This reacted in favour of the breeder, who was encouraged to raise more hockhams, and when the pigs are available they will be fed.

There is a substantial increase in the quantity of purchased foods, as feeders think they can fatten quicker with these than by the use of home grown stuffs alone. His opinion, however, was that if a greater proportion of the feeding were raised by the farmer the profit would be greater. Many people in his district were for their own information experimenting with different classes of food, but they do not keep any records.

Any demonstrations in the housing, feeding, and treatment of pigs should be carried out under local conditions. The literature should be adequately supplemented by lectures.

He had raised a large number of stores, but they were finished in England. He had experience of a considerable number of breeds. The cross with the Large York and the local pigs gave an excellent animal.

A quick growing and maturing animal was wanted. It paid both the feeder and then to turn out a pig at 12 stone, and for this reason he preferred the Middle York.

He was diffident of getting the edible bacon from the Large York at 1½ cwt. The opinion of the bacon curer should, however, prevail in this matter. He was generally told that it was difficult to find a better breed than the one in the district and they were now largely of the Large York type. The greater number of these animals went to the curers, the heavy pigs being shipped. It is but recently that the farmers were adopting the practice of selling the lighter weights. The price received for hockhams is a great inducement to the breeder.

Speaking generally the pig trade in this country is very successful, and with a few matters remedied it would be much more so. If prices could be maintained at a reasonable figure more pigs would be kept. He was not conversant with the conditions governing trade competition on the other side, but he recognised that it was not possible to avoid a certain amount of fluctuation. The law of supply and demand must eventually control prices. Bacon, however, was not an article that required immediate consumption and there should not be such sudden variations in the value of pork.

One of the objects of feeders should be to have a larger proportion of the pigs finishing in summer in order to be able to take advantage of the higher prices which then prevail.

## TENTH PUBLIC SITTING.

THURSDAY, 3RD DECEMBER, 1914.

AT 10 O'CLOCK, A.M.

At the Courthouse, Sligo.

## PRESENT :

Mr. JAMES S. GORDON, B.Sc. (Chairman).

Mr. B. N. BORN.

Mr. PATRICK CLARK.

Mr. J. WHELAN, J.P.

Mr. O. W. H. HOLLISTON, B.A.

Mr. A. C. COOK, representing Messrs. Cook and McNeilly, Ltd., Bacon Curers, Sligo.

His experience coincided with the view expressed that from July, 1911, to early in 1912, when the price for pork was low and meat dear, it was unprofitable to keep pigs, that a number of the sows were sold off, and that the shortage was apparent in the following year.

He expressed his gratification at seeing a Committee appointed to deal with the problem of the pig breeding industry, and said that if they were only to do something towards stopping out disease a great deal of the hardships and difficulties both of the farmers and merchants would be at an end. The disease he referred to principally is that known as "Purple" or "Disorder." "Diamond" is another disease altogether; pigs can be cured of Diamond; but Purple is very common and causes heavy mortality, especially in Mayo and all through Sligo; or, approximately the district from Sligo to Crossnacreegan, right into Tuberculosis, round Charlestown, and around the coast. The disease had been prevalent for over 25 years, and is now on the increase.

Local veterinary surgeons had seen the disease repeatedly and do not appear to understand it. It is not swine fever, it is more like the American Cholera, and usually attacks pigs when nearly finished for the market. The disease is known in England as "Sold-down." From observation he thought it was most infectious and spread rapidly. It generally shows first on the ears and neck, which turn purple, and the pig becomes quite cold. The disease then spreads right down the back. In some cases the animal dies within an hour. Some time after death the carcass becomes purple and will turn black even after being bled. The blood becomes jet black and all the fat is of a purple colour. The stomach seems to be swollen and all the organs more or less diseased. The carcass is of no use to the curers, and becomes a total loss. Hundreds of pigs die from this disease, especially in the summer. A similar disease in Holland was some years ago stamped out by the use of a serum, with which the pigs were inoculated when young. This serum acted as a preventive only. He hoped the Department would take steps to deal with the matter in this country.

The pig industry is not so extensive in his district as in former years. This he thought was caused by the reduction in breeding sows which resulted in hams being scarce and dear, with the result that feeders could not show a profit. This year they had run from 35/- to 50/-. With the price of pork moderate, feeding stuffs high, and hams dear there could be little profit in feeding. He had no recollection of a glut of hams occurring in his district or of the price going below £1, and except in 1912 there was no large number of sows offered for sale. In that year America passed through a financial crisis, pork was cheap and feeding stuffs dear and sows were disposed of all over the world. He did not see any appreciable decrease this year as compared with 1911, but he found a greater difficulty in getting supplies. It might be that outside competition was stronger.

There is absolutely no combination amongst merchants in the Sligo district; the competition amongst them is exceptionally keen. Shippers buy the heavy

pigs on foot to go to Manchester for pork; and there is a good demand and keen competition around Sligo for all classes of pigs, buyers coming from Londonderry as well as the North; and he believed that the prices given in Sligo would compare favourably with any part of Ireland.

A plentiful supply of pigs usually followed a good potato crop. Prices paid for pigs have been high and should give a good return, but when Indian meal is dear any farmer without an adequate quantity of potatoes finds it hard to make pig feeding profitable.

His firm is of opinion that the quality of the pork would be improved if the pigs were of a leaner type. For his trade too much back fat is put on, which tends to make the bacon unsaleable. He would like to see placed out breds of a long type to cross with the sows in the district.

He would not agree with the statement that the northern bacon curers considered the present pigs in Mayo and Sligo to be the best suited for their business, as he believed they preferred those from Galway and Kerry. Perhaps the district around Belmullet is excellent; and the next district would be Charlestown, which has a different class of pig. He would like a boar not so much of the York type, but he could not specify a breed that met his requirements.

He wanted pigs from 9 to 12 stone. Everyone knew that a 1½ cent. pig is saleable everywhere and commanded the best price, and he did his best to convince feeders of this fact. After this weight, however, the pig puts on more weight in a shorter time, so that people keep it longer. He was not in a position to offer an opinion as to whether a greater proportion of food was required to put on a pound of pork in this later stage.

Regarding the sows, he allowed the farmer a few sh. each way so long as the animal is saleable, and occasionally would not mind going up to 18 stone, but after that there would be a cut of 2/- per cwt. When unfortunately he had to take a 2 cent. pig he was obliged to cut to 4/- or 5/- below the top. He only took this weight, however, to accommodate a farmer who brought in a number of other pigs.

He had three depots at which he took in supplies, and one buyer who bought pigs alive and dealt direct with the farmer.

He had not in the past ten years noticed any difference in the quality of the pigs that came to his firm, but he formerly had more of the black animals. He took no part with the northern bacon curers in sending out boars and was not aware of this scheme.

The main supplies of pigs came from small holders. The large farmer did not, as a rule, keep more than two or three. If the latter could be induced to start breeding it would be a change for the better. He is in the position to do so as he usually has a good supply of milk and oil from the farm, but he understood he experienced difficulty in getting female servants to attend pigs. The labour question also probably deterred him from feeding more, and he devoted a greater amount of attention to cattle. The small farmer is often handicapped in keeping sows by the scarcity of milk.

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Mr. A. C. Cook—continued.

Mr. Mathias Ferguson—continued.

The raising of pigs on an extensive scale seemed to be unknown in the West. He was not conversant with the manner in which small farmers bred and kept pigs, but when more than a few were fattened he used "Clavendo." He did not know anything about the merits of raw as compared with cooked food.

He considered that at present pigs are ignored too much and do not get sufficient attention. There had a tendency to increase the proportion of fat in the pork. The old Irish pig would be as lean as 2 cwt. as some of the present animals at 1 cwt.

Fewer pigs are kept in the urban districts, but the sanitary laws are not too rigidly enforced, and he would not ascribe the decrease to this cause. The power of husbandry would be the principal consideration, as when high there was too small a margin for profit. The man who breeds in the town cannot afford to take undue risks by paying dear for a husband and perhaps sell on a falling market.

Though his experience would agree with the statement that 1 lb. of pork might be obtained from 5 lb. of meal the man with weekly wages of 41 has no special regard to what it costs to feed a pig. If husbandry could be definitely shown that they could rely on obtaining a profit by following a particular line of feeding he believed that every person who could do so would feed pigs.

The farmer did not always send very much. So that to educate him to better methods it would be advisable to carry out local experiments and publish the results in the local press. He believed there is a good profit to be made out of pigs, as otherwise he would not expect farmers to take up the industry,—in Holland the people realised its importance. But farmers in his district were quite discouraged when they lost a few pigs from the disease he referred to.

In the districts in which he bought supplies it is not customary for labourers to have pigs. He did not consider, however, that this was due to lack of housing accommodation. They all keep poultry.

Mr. MATHIAS FERGUSON, Cloghalee, County Sligo.

Stated he was a farmer and had a premium boar. He was formerly a breeder and feeder of pigs.

Most of the pigs are raised on small holdings where practically all the work is done by the farmer and his family, but on the large holdings labourers consider it beneath them to attend to pigs.

The extent to which the price of feeding stuffs had gone up deterred many people from feeding pigs.

Six and twelve months old calves are now paying well, and the small holders think it is more profitable to raise them than pigs. The high price of stores also induced a number of farmers to rear their young stock.

The people of his district would now have nothing but the Large York. There had never been a Middle York in the district. He did not agree with the type of pig that Mr. Cook required. The farmers wanted a pig that would mature quickly. The old practice of keeping a pig for 10 or 12 months has died out. They know that the highest price is obtainable for a 28 stone animal, and the Large York premium boar, which he had, is quite satisfactory.

The disease referred to by Mr. Cook had not been very prevalent in his district for some years past.

Labourers formerly fattened two sets of pigs in the year, but they did not appear to be engaged in the industry to the same extent during the past 3 or 4 years; probably they did not pay, and the high cost of bone-meal might have something to do with it.

The Rural Council cottages were provided with a shed which is not very suitable for pigs, as the floors are usually under the ground level. If proper accommodation were put up it might tend to induce many more of these people to keep pigs.

Feeding is usually undertaken by small farmers of from 6 to 20 acres, and is on the increase, as he found many more sows are coming to his boar.

A premium boar can usually be profitably kept, but if he charged a fee of 2/- instead of 1/- he did not think it would prevent people sending sows, as 2/- is a small matter to them. When the number for the premium is completed he invariably charged 2/-.

In backward districts, however, where a good boar is not appreciated it might be necessary to offer a low fee as an inducement, but when the premium animal had made a reputation there was no difficulty.

He believed that more attention is being paid to poultry, which might have some influence on pig keeping. Opinions differed as to whether porkers paid, but it had the advantage of requiring less capital to start.

Mr. ANDREW OATES, Casteall, Boyle.

Farmer, breeder and feeder of pigs and had been engaged in the industry for a great many years.

He attributed the shrinkage of pigs in 1913 to the uncertainty of obtaining a satisfactory price and the severe fluctuations. At one time he got a good return, at other times (1911 and 1912) he was a loser. In 1911 he sold pigs at 45/-. Twelve weeks old bone-hams then went down to 14/- and he had to give up breeding. The former price was 25/-.

In 1912 there were many cases of abortion.

Farmers do not feed beyond 14 stones, as this weight pays best.

He usually fed 2 lb. of meal and a reasonable quantity of potatoes daily; the price of the latter is usually 4/- per cwt.

He had carried out a feeding experiment under the supervision of the County Agricultural Instructor with a view to testing the comparative values of Indian and barley meals for pig feeding. The meals were fed raw and the results were practically identical. Pork was 45/- per cwt. only at the time the pigs were sold and he lost on the business. After the pigs reached 11 or 12 weeks old he invariably found that raw food gave the best return. It was desirable to give cooked food to younger animals.

He maintained that when the farmer had to depend upon purchased feeding stuffs he could not make a profit out of the business.

The most economical feeding is the offal from a tillage farm. Meal should be bought only when a fair price may be expected for pork. He would usually make an allowance of 5/- per cwt. of pork to cover fuel, labour, etc. A half dozen pigs could, however, be as easily attended to as one or two.

Pork now averages 30/4, and he considered that a fair price. There is little competition in the fairs; and when a few buyers only are present there appears to be a ring and a very low price is given. As the fair pigs had to be given to whoever made the highest offer. When the farmer has fattened his pig as far as it can go he must sell it. If he brings it home it will be depreciating, and very often when he brings out a pig he cannot afford to keep it longer. He differed from Mr. Cook in this connection. It might be all right if the pigs were brought into his depots or factory, but all the pigs could not be sold to this way.

He did not agree with Mr. Cook that the full price is given for pork. If there were no competition the price given by his firm would be very small as he had seen at several fairs when the Limerick men did not turn up. The latter improve the buying considerably. He acknowledged that in similar circumstances he would be inclined to do the same himself.

He would suggest the establishment of a curing factory in each county, and co-operation would be desirable. He had not previously been aware of the manner in which prices were regulated by foreign competition, and though he now recognised that co-operative societies would have to encounter similar conditions their establishment would give the farmer more confidence that he was securing the full value for his produce.

SLIGO, 3rd December, 1934.

Mr. JOHN MULLIGAN, D.C., Coovengra Cross,  
Rivestown, Co. Sligo.

Farmer. Had considerable experience in the breeding and feeding of pigs.

He considered that the labour difficulty is largely responsible for the reduction in the number of pigs bred, but the main cause is the inadequate amount of tillage carried on in the country, together with the high price of purchased feeding stuffs.

In the Rivestown district there appeared to have been a general difficulty in getting sows to breed, but he had no trouble with his own stock.

He quite disagreed with Mr. Cook as to the prevalence of disease. He had seen but few cases of piglets. The only disease that existed in the Rivestown district was "Diamond," which he himself believed to be quite harmless and largely attributable to indigestion. When the symptoms were noticeable he gave his pigs a dose of Epsom Salts.

Pig feeding is not carried out so extensively as heretofore, and he was of opinion that there has been a continuous decrease even from 1913.

There is a fair crop of potatoes, but the price of Indian meal prevented several people from feeding. At one time it went up to 10/- per cwt. From August to March especially potatoes constitute the bulk of the food for pigs. Some feeders who have few potatoes depend upon separated milk and cabbage, etc. He considered that good pigs could be fed on cabbage together with an addition of Indian meal, bran, and separated milk. He did not think the pig could digest Indian meal unless it were boiled. He had tried raw and cooked food and was of opinion that the former did not give him a good return. He was aware of the experiments conducted by the Department in this connection, but these results were contrary to his experience.

A good crop of potatoes is an inducement to keep pigs. The high price of meal, however, is a discouragement. Raw well-grown meal mixed up with boiled potatoes is eaten freely. Crushed oats is also useful: he would as soon have 1/- cwt. as a sack of Indian corn, and he gave this to young pigs from an early age. The addition of separated milk to crushed oats is an advantage.

About eight years ago he obtained a premium boar but the animal was not appreciated. He then got a White Ulster and the progeny was more saleable. His next boar was a cross from the White Ulster and an ordinary sow, and it is giving good results.

An extension of tillage would be the best encouragement that could be given to pig feeding, as he did not believe it would pay unless more of the food were grown at home, and the person who had not to be buying did not notice the cost of the feeding.

On the large holdings more land should be tilled to fatten pigs, but something should be done to avoid the fluctuations in the price of pork. When there is no competition in the market pigs have to be sold very cheap. He referred to a dead meat market at Collooney where irrespective of the weight of the pork a low price was returned, and although he understood that there were special circumstances applying in that particular case there were others where the price did not compare favourably with the quotations in other markets.

The holding of two fairs close together prevented competition. From March to September there is no supply and no competition, with the result that the price is low. There is a dead meat market convenient, and he would like to see more White Ulster boars introduced, but a greater number of the pigs are sold alive.

Pigs are usually kept by the labourers. A sort of shed is usually provided with the Rural District Council cottages, and this can be converted into a pig house. It has a good concrete floor. The object in putting up this building is to allow the labourer to turn it to any purpose he requires. It was usually availed of for keeping pigs, for which he believed it to be quite suitable.

There appeared to be an increase in the number of poultries kept, but he did not think that this had interfered with the number of pigs maintained.

Mr. D. AHERN, Manager, Boyle Co-operative Agricultural and Dairy Society, Ltd., Boyle.

Attributed the shrinkage in the number of pigs to the absence of tillage and winter dairying. The small holder is doing a fair share as regards tillage, but the large farmer is not doing what he ought, and pressure should be put upon him by applying a system of differential taxation. His view would be to tax a farmer who would not have from 20 to 25 per cent. of the land under tillage. He believed that wherever properly carried out tillage paid, but continuous cropping is also necessary to maintain a supply of food all the year round. An increased supply of milk for winter dairying would leave more available for pigs. Tillage alone, without improving the milking capacity of dairy stock, would not suffice to secure the maximum production of milk. Some of the How common cows gave a very poor yield, the average for the county would not reach 400 gallons annually. At the same time these cows would command as high a price as any others in the open market or fair.

In his opinion the decrease in the number of pigs within recent years had been continuous, but he could not offer an opinion as to whether this would be likely to continue. He would not say that tillage had decreased during the past couple of years, but winter dairying had not progressed. A pound of butter could be made from 2 gallons of milk at present as compared with 2½ in summer, but owing to the small supply of milk there is greater expense in its manufacture. More tillage and winter dairying would mean a greater number of pigs. Separated milk and barley should be the chief foods for pigs, but he had no experience of feeding pigs.

The price of pork fluctuates so much that in the larger number of cases published market values are not obtainable. The price of pork, for instance, in the North is 4/- to 4½/- over Boyle, which had a live weight market. He appreciated, of course, the difference between dead and live weight and calculated accordingly. In Boyle the quotation would be, say, 50/-, and other markets, such as Belfast, might be up to 62/-.

In October, 1912, with a view to obtaining a better price for pigs in the district the Boyle Society tried an experiment in the marketing of pork. Thirty pigs were purchased in the local fair, they were killed and the pork dressed at the slaughter and shipped to London (Smithfield) market. The pigs were treated just as in Collooney market. The net profit was £17. He estimated that if all the pigs at that fair were marketed similarly the sellers would have received about £800 extra. He graded the pigs to suit different markets. This business was continued for six or eight months, but eventually resulted in a heavy loss. The pigs were bought in the local fairs and from the members of the Society. The Smithfield merchants expressed themselves as perfectly satisfied with the pork, but on other occasions the pork did not arrive in time and the market was missed and the pork had to be sold at a reduced price. In one instance owing to transit delays the consignments was unsaleable. Some of the pork got into the market in time, but he could not rely upon this happening regularly. The consignments were going to three different salesmen, and they appeared to be anxious to get the business. Were the Society in a position to continue and the freight and transit facilities could be suitably adapted this system would have provided a more ready and profitable outlet for the farmer, but present conditions must be altered before he would recommend any district to take up a similar project. He took up the matter with the merchants and railway companies but could not get any satisfaction or redress, as he was not in a position to prove wilful negligence on the part of the railway companies. Under existing conditions it would not be profitable for his Society to continue the business. Had the consignments been sent at the railway companies instead of the Society's risk the rate would have been 9/8 as compared with 4/8. The whole question had been inquired into by Mr. Reeves, one of the Department's Transit Inspectors.

He considered that by adopting a system of co-operation feeders should be their own curers and



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Mr. D. J. HERR—continued.

shippers of bacon and pork, but they would need to have someone to look after their interests during timent and on the other side. He recognised, however, that owing to the initial capital required there would be only a remote prospect of starting a co-operative society for the curing of pork, but co-operation should be resorted to in shipping, and more pork cured for home consumption. The Eastern Counties' Association, Ipswich, dealt exclusively in pork. The members advised the Secretary of the Association whenever they had pigs ready to market. An expert was sent round who valued them on behalf of the Association for the next market. The farmer was then free to dispose of the pigs in the best advantage, but if he could not equal the figure put on them by the Association that body took them over at their expert's valuation. This system would be worth inquiring into with a view to providing an alternative outlet and more competition. Five thousand pounds worth of pigs per month were being handled at the time he referred to. The bacon curers were then beginning to deal with the Association direct with the result that the middlemen were being shut out. The advantage of having a local factory is that the seller of a pig can come in and see it killed and shown any defects due to wrong feeding, etc. Farmers would be glad to avail of such facilities, which are not given now.

The main point for the farmer is how to make the most profit, and he believed that an increase in the area under tillage, together with an improvement in the milking strain of the cows, would leave cheap feed available and result in a greater production of pigs.

Mr. J. R. BARBER, Knockoy, Collooney.

Mr. Barber stated he was a breeder and feeder of pigs. He expressed the opinion that the shrinkage in the number of pigs kept in the district was mainly due to the difficulty of obtaining labour. Tillage is not practised by many farmers. The available labour was mostly employed in the works in Collooney, and these people did not keep pigs.

He agreed, however, that the greater proportion of the pigs are maintained by the smaller holders, who

relied upon their own family to do the work, and that the labourer difficulty did not affect them.

The price of Indian meal would also have a considerable influence on the number of pigs fed as would the extent of the potato crop. A plentiful supply of potatoes would encourage the keeping of a much larger number of pigs and vice versa.

There were great fluctuations in the price of pork, but he was bound to say that there is plenty of competition in the buying of pigs, which is hoped would be still further improved by a new fair which had recently been started in Collooney. There is a market for dead pork every week and pigs are also bought by hand for the southern curers, but there is no scales except for pork. There is no dead meat market in Sligo. The loss entailed by feeders as the result of the recent failure of one of the Collooney dead meat markets, to which reference had been made, had a serious effect on pig breeding. He was aware of the misunderstanding which resulted in the failure of the market on that occasion and did not blame the merchants in any way. In the circumstances everything possible was done to avert a total loss, but it was an unfortunate occurrence so far as the industry was concerned. The system adopted in Collooney is to send the pig to the killer who charged 1/6 per pig for killing and weighing and stopped 1/- afterwards when paying for the animal.

He favoured crosses between two distinct breeds, and for the trade in his district that between the Large York and White Uster is most suitable. A cross from the Large Black would probably be best of all. He recognised the difficulty, however, of maintaining a supply of first crosses. For general purposes perhaps the Large York pigs are the most suitable, and if he were keeping sows himself he would have this breed; at present he only kept a premium boar of the Large York type.

He was not aware that breeding sows were giving any special trouble, nor had he any knowledge of the disease referred to by Mr. Cook as "purple," though he was aware that some young pigs had died from indigestion.

Labourers in Rural Districts do not keep pigs. They prefer poultry and consider that these pay better, but he would not say that poultry is displacing pig feeding. There are practically no pigs fed in his district on account of the small amount of tillage. This should first be remedied, but to deal with it the labour difficulty had to be considered.

## ELEVENTH PUBLIC SITTING.

FRIDAY, 4TH DECEMBER, 1914.

AT 10 O'CLOCK, A.M.

At the Courthouse, Longford.

## PRESENT:

Mr. JAMES S. GORDON, B.Sc. (Chairman).  
Mr. B. M. BOYD.  
Mr. PATRICK CLUNE.

Mr. J. WHITTINGTON, B.A.  
Mr. O. W. H. ROULSTON, B.A.

Mr. T. W. DELANY, Solicitor, Longford.

Mr. T. W. Delany—continued.

Mr. Delany, Chairman, Longford County Committee of Agriculture, stated he had been under the impression that there was no shrinkage in the number of pigs kept in his county. On the contrary, he thought the industry had been worked up to a fair standard since the inception of the Committee's schemes, and that it was now developing. The low prices prevailing in 1911 and 1912 might have proved discouraging and resulted in a temporary falling off in pigs conse-

quential upon the Feet and Mouth restrictions which reduced competition. Some years ago there was also discontent with the returns and a number of the breeding stock were sold off. The owners probably found it necessary to do this.

No matter what is done to improve the pig trade the farmer will not be induced to take it up unless he can be shown that it will pay him better than his present business.

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Mr. T. W. Delany—continued.

One of the first steps taken by the Longford Committee when they were appointed was to form a small sub-committee to deal with the swine industry. There was a difficulty experienced in locating the pure bred sires. Fourteen were bought the first year, but when the results were seen in the following year this difficulty was at an end, and the further development of the scheme is now only prevented by lack of funds. Although there were plenty of applicants each year the boars were not available, but so long as the pig industry is profitable he thought this would be all right in future. Longford is a small county, and they had but £70 for boars, which provided usually for about 17 or 18. The 1d. rate left less than £200 for agricultural purposes, out of which £100 was allocated for horses and £145 for cattle. On account of the number of people interested in small industries there are as many demands for assistance as in a large county, though Longford has much less funds. Where special efforts were required in such circumstances he considered that the Department should give special assistance.

The production of pigs on large holdings is not likely to be an attractive proposition on account of the labour question involved. Longford mostly consists of small holdings worked by the farmer and his family and he saw no reason why these should not produce pigs in larger numbers, particularly where the land is not suitable for finishing cattle. This, however, involved the production of more home grown food. At the present price for pigs he was confident that they would be raised in increased numbers. To develop the industry it was essential that there should be an adequate return.

The labour difficulty is probably due both to the farmer and labourer. The latter likes to have regular employment and the farmer cannot provide this unless he tills. Without continuous employment the labourer must try to make as much in one season as will keep him the year round. The man in the Rural Council cottage is more independent of the farmer and he generally has some other little industry for his spare time. There is a labourers' association in Longford who are now seeking to have some of the roads done by direct labour. By engaging at this during the winter and with work from the farmer in summer it is hoped to provide continuous employment. Casual labour was responsible for a good deal of difficulty, but as pigs are principally kept by the small farmer, who did the work with his own family, he thought the labour question did not affect this industry.

The usual wages for a labourer employed the year round would be 7s. weekly and keep; in some districts a couple of shillings higher. Employment is either weekly or half-yearly.

In Longford pigs of all kinds are produced, large numbers going to the curers and considerable quantities are brought alive for export, and this latter trade should be encouraged as it keeps up a healthy rivalry and provides an outlet for various qualities.

The general system of feeding pigs to large weight should be discontinued in favour of turning out two lots of pigs in the year.

Farmers depended mainly upon home grown stuff for pig feeding, and this practice should be extended to make the industry entirely independent of purchased material, the increased price of which had led to a slight falling off in pig numbers. Foreign food is so much easier to get in that there is a temptation, when there is a margin for profit, to pursue this method though less profitable, than to rely on the more strenuous policy of going in for additional tillage with the extra labour involved.

Pigs require more labour and attention than cattle, the present price for which is a substantial factor to be reckoned with, but as an industry for the small farmer he thought they were more profitable.

In Longford there are between 600 and 700 labourers' cottages. In the majority of cases the plots are tilled. Most of them keep pigs and poultry; the latter is not interfering with the number of the former. A pigsty, some 20 yards from the house, is usually included. Many put a plot of land cultivated for them by the farmer, the produce of which

Mr. T. W. Delany—continued.

is used for pig feeding. Small farmers are putting up improved accommodation for pigs, and he did not hear any complaints as regards disease.

His views on the breeds and quality was derived solely from intercourse with those best acquainted with the interests of the county in this aspect. Longford had not yet reached the desired standard. The County Committee had always favoured the Large York, but when there was from time to time default in the supply Blacks were introduced, but these were going out of favour. They had not met requirements to the extent anticipated. The Black and white crosses commanded good prices, but some of the curers object to them. When properly turned out the white seemed to be preferred. More recently the White Ulster has been asked for, especially in the southern part of the county. He was informed that the presence of these prejudicial crosses, and in the general interests of the industry the County Committee was now prepared to accept his view that the Large York is the best breed for Longford.

The pork trade was unknown in Longford and there are no local buyers. There is a good shambles, but it does not appear to be used except by people who kill and cure pigs for home consumption. The local people preferred home cured to American bacon.

A strike depot was started at Droichead some years ago, and fell into disuse, but the introduction of the dead pork trade there has resulted in its being made use of again.

So long as the northern end of the county think they can get a better price for the White Ulster he did not object to them, but he did not want them brought into South Longford to destroy the trade with the southern curers.

If Longford were in better touch with northern curers the White Ulster would be more favoured and there was no reason why this trade should not be developed as the transit facilities were adequate.

The buying is now practically confined to the bacon curers and shippers, the former being the larger, and when representatives come from Cork, Limerick, and Waterford competition is improved. Shippers take the heavier animals and also some of the medium weight. This outlet should be encouraged in order to maintain a good market for the various qualities. Between them the fairs are usually cleared.

He was doubtful of being able to induce farmers to sell pigs by weight. Educationally this practice should be useful. They are satisfied with the existing buying and competition. The prices given by the curers on a particular day are same, but he believed that this was the fair market figure ruling for the day, and the highest they could give consistent with their own business interests. Naturally there would be a certain understanding between the buyers for their own security.

Longford offers excellent facilities for the disposal of both pigs and cattle, and the fairs were developing. Of the 13, two are held under Letters Patent, the others are merely fixed by the Urban Council, without any further authority, in order to provide an outlet for stock.

The local authority in Longford is the Urban Council, but they do not own the fairs. They could acquire these, but there were good reasons for not doing so.

It would be to the general advantage if some central authority would regulate fairs and prevent the cheating which occurs at present. This might, perhaps, require legislation. Such an authority could also take steps to have buying agents at an appointed hour and prevent the fairs from being anticipated by men who go round to the farms some days beforehand and destroy the fair.

He agreed that if the Department held a conference between the local authorities and the interests concerned a good deal might be done, as he recognised the difficulty at present of obtaining legislation, which would moreover be facilitated if this were done.

If buying by live weight were introduced it would get over some of the difficulty, as it appeared to be a more satisfactory system, though personally he preferred the fairs, and it was perhaps better to make the most of the system to which the people were accustomed.

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Mr. F. W. Delaney—continued.

Mr. Archibald Higgins—continued.

The local authorities should also have power to provide proper fair grounds and proper facilities generally. The fair grounds might not always be self-supporting, so that the financing of this work might be made a charge on the county rates as a good deal would be saved in the upkeep of the roads and streets on which the fairs are now held, to which the existing system is ruinous. It was not to the public interest that tolls should be charged. In Longford they are paid by the purchaser. He favoured all fairs being free. Tolls deterred farmers from bringing in stock and tended to induce them to sell on the farm.

It is understood that the Department's Veterinary Inspectors visit fairs and report generally, principally as regards the freedom of sheep from scab. This work might be a little more efficient. The work should, however, be extended and steps taken to have a more regular examination both by the Department's and the local authorities' inspectors. The very fact of their presence would be useful throughout the country for the detection of disease. All fairs at which pigs are exhibited should also be inspected, and where considered advisable visits paid to the farms. The inspectors should be given the necessary powers to enable them to do this. Suspicious cases could then be more satisfactorily dealt with. Such powers would have a deterrent effect in preventing people bringing out stock from premises where disease existed or was suspected. There should be powers similar to those possessed under the Diseases, Contagious, and Milkshops Order.

With a small addition to the salaries of existing officers it should be quite possible to extend the scope of their duties to enable them to deal with these matters. At present if the disease is not notified there is no chance of discovering it except by accident. At the same time he did not believe disease was prevalent, but his suggestion would help to combat swine fever. This would also guard against outbreaks of Foot and Mouth disease.

The Department should also see that there are adequate transit facilities for clearing fairs, but a great deal of this difficulty would be got over by preventing the clustering of fairs.

Pigs are fed by small householders in Longford town, and the keeping of pigs by such people was, he believed, increasing. The sanitary regulations did not have any effect on the industry, but in Longford they had been reasonably applied. Of course where necessary the pigs were removed.

Poultry keeping has also increased in the county, but he did not consider that this had influenced the number of pigs. The latter is more a man's occupation, while poultry are left to women. Just now the satisfactory returns from poultry are a great inducement, but he did not think either branch of industry is being developed at the expense of the other.

In the case of outbreaks of any disease the minimum of troublesome regulation should be imposed. In fact by intelligent co-operation between the people and the Department a great deal of trouble would accrue to the live stock industry generally.

Mr. ARCHIBALD HIGGINS, Carrowa, Eecneagh, Co. Longford.

Mr. Higgins stated he was a farmer of about 100 acres, and breeder and feeder of pigs. He did not consider there was any shrinkage so far as Longford was concerned. Store cattle raising, however, might be said to be the principal industry of the county.

There is a general tendency on the part of all classes of farmers to improve their standing, and already there is fair accommodation for pigs on small holdings.

The industry is mainly dependent upon the small farmer, who with his family does most of the work. On the larger farms servants do not like to have to attend to pigs. As a rule labourers have to be kept the year round, the wages in such cases being about 5/- weekly and keep. The labourer prefers this sys-

tem to higher wages without keep. He also gets some perquisites. The farmer usually gives him a rod of ground which provides feeding for pigs. When boars are dear the labourer finds it very difficult to buy. When he sells a pig at a good price he is more ready to buy a boar to replace it.

Labourers in the Rural Council cottages it is usual to give wages alone, but this man works for whoever he pleases. The wages in harvest time would be 2/- to 2/6 a day without meals.

The total amount that could be expended on a labourer's cottage was limited by the Local Government Board. The buildings cost about £135, and this included a good pig house. The majority of these holders till their gardens and keep pigs.

In recent years there has been no complaints regarding prices or the system of buying. So far as he was aware there is very little disease.

He had heard that the black pig was objected to, and from his own experience he did not like either the black or the Ulster, and he believed that the County Committee are acting rightly in the interests of the industry in confining premiums to the Large Pork.

Pigs are usually fed on potatoes, turnips, in some cases mangels, and crushed oats. Indian meal is used to a considerable extent and its price influenced the number of pigs kept, especially by the poorer people; as did also the potato crop. The custom is to feed the pig all the time, and he believed this to be the most profitable way. It took nine months to do this. The pig would then be 18 to 20 stones. He could not sell it sooner. He did not understand the practice of finishing in six months, though he believed it paid better. He was aware that the best price was given for pigs of 14 cwt., but it was not the custom to sell such animals. There was considerable difference in the attendance required for a sow and boars as compared with stores.

He invariably sold the young boars except one or two which were finished for home consumption. A good sow produces two litters in the year, and he had got as much as £22 10s. for a litter.

Mr. JOHN FARRELL, Loughan House, Tashbury, Co. Longford.

Farmed about 150 acres. Agreed generally with the views expressed by the previous witness (Mr. Higgins) as to the conditions under which the pig industry was carried on.

He would keep more pigs but for the difficulty he experienced in getting servants to attend to them, though he kept six men regularly. The wages would average about 5/6 weekly, with keep and perquisites.

The ranching system and raising of store cattle left people disinclined to till or to engage in pig feeding.

By using some milt, which, however, was scarce in Longford, it was quite possible to finish in a shorter time, and he believed this was preferable to the present custom of keeping pigs for a lengthy period; but the latter practice is becoming rarer.

Most of the farmers under 30 acres keep sows, and they are the mainstay of the industry. They till a greater proportion of the land and usually have milt available. Except Indian meal and pollard they usually depend upon home grown stuffs. The Indian meal is mixed up with cooked potatoes. He believed the necessity for cooking reduced the profit considerably.

In the summer time his practice is to mix raw Indian meal and raw pulped mangels. Pigs did well on this. He had heard the statement regarding the comparative feeding value of potatoes and Indian meal and his experience would coincide with this.

Farmers are making 9/- a cwt. for pork, and there is no complaint as regards prices.

There is now comparatively little disease, but pigs are better kept than formerly. As already stated, Longford is more of a cattle county, and these are paying fairly well at present.

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Mr. THOMAS MASTERSON, Edgeworthstown, Co. Longford.

Mr. Thomas Masterson—continued.

Stated that he was a farmer of about 180 acres, and merchant. Though he resided in the opposite end of the county to the previous witnesses he agreed generally with the views they had expressed.

The practice is to buy bonehams in April, run them on the grass during summer, fatten on the potatoes in autumn and finish to big weights, when feeding became scarce or dear in spring many of the pigs were marketed. He would say, however, that the farmer lost nothing by running pigs on the grass in summer as the cost was trifling. If a little more attention were paid to them from April to July the return would be better.

He found it more profitable to turn out two lots in the year, but few people in the district followed his example. When bonehams were dear at meant a smaller profit. When fed to a nice size the price was fairly regular. He believed that after attaining a certain weight the pigs did not pay for feeding, and there is a better demand for the lighter class of animal.

There was not much margin for profit when pork came down to 48/-.

Most of his land was in grass. He kept pigs to utilise offal from a bakery and mixed this with turnips which he bought, together with a small quantity of bran. The pigs were sold at about six months old.

He preferred the Large York. He would not have the black. He thought that perhaps a number of the people were not quite clear as to the distinction between the York and the Ulster.

Experiments carried out in the neighbourhood would probably be the best method of educating farmers. He suggested experiments on the lines of those conducted on the feeding of cattle. The Instructor could make the results known at his lectures.

He emphasised the difficulty as regards labour, particularly for pig feeding. The large farmer who is dependent on outside assistance will not employ more hands than he can help.

More pigs came into Graunod than Longford owing to the fact that it is the centre of a district of small farmers.

Many of the small householders in Edgeworthstown keep pigs. The sanitary authority sees that they are a certain distance from the house, usually 25 or 30 feet, but the regulations, however, are not too rigidly enforced provided the premises are maintained in a cleanly condition. Of course when this is not done the sanitary officer takes the necessary steps to the interests of the public health. He did not believe that these regulations interfered with the industry, and that the number kept in this way is probably equal to that of ten years ago, but the high price of bonehams would prevent many of these people from feeding. If more pigs were bred in order to equalise the supply, prices would be more reasonable.

## TWELFTH PUBLIC SITTING.

MONDAY, 14TH DECEMBER, 1914.

AT 10 O'CLOCK, A.M.

At the Town Hall, Tipperary.

### PRESENT :

Mr. JAMES S. GEORGE, J.S.C. (Chairman).  
Mr. B. N. BOND.  
Mr. STEPHEN O'MARA.

Mr. PATRICK CLUNE.  
Mr. J. WILKINSON, J.P.  
Mr. O. W. H. ROULSTON, J.I.

Mr. PIERSE McCAN, Ballyroven, Cashel.

Mr. Piers McCAN—continued.

Stated that he was a farmer and had a fair number of pigs. On the previous day he had taken an opportunity of visiting and obtaining the views of a number of cottiers and small holders. They told him that the high price of bonehams, Indian meal, and fuel, and the fact that wages remained the same while the cost of their own living was going up, left them in such a position that they were unable to keep pigs.

From the point of view of the larger holder, the uncertainty of the price for fat pigs and its concomitant and constant fluctuations was largely responsible for discouraging them from keeping pigs. He submitted questions for the different months within the past three years to show the variation in prices.

In 1912 prices were low, and people got out of this stock, which were accordingly scarce in 1913 and consequently dearer. These fluctuations may have existed all the time, but they give the impression that merchants can control prices as they like. He knew nothing about the merchants' side of the business, but their buyers told him that they were controlled by the gross-channel markets; that if they have a bad market for pork on the other side they cut down the price of pigs here in order to make good the loss. While for considerable quantities of bacon in large towns the price may vary somewhat, the re-

tail price throughout the country remains the same, even though feeding stuffs be going up. He acknowledged, however, that the fluctuations in the retail price of bacon would not amount to more than 1d. in the lb.

If it were the case that fluctuations were so violent on the London market, of course, it would be difficult to expect that there would not be fluctuations here. The prices of cattle do not appear to go up and down to the same degree. Pigs are sold more frequently, and the market is brought home to feeders more forcibly.

Even what he had heard to-day he could better appreciate the reason for these fluctuations, and he now understood that this difficulty could not be remedied.

If pig feeders, both large and small, could be assured of a good price all the year round the number of pigs would at once increase.

There had been but one buyer in Cashel, so that prices there were usually 1/- below Thurles, where there is generally good all round competition, with the result that most of the pigs in that part of the country went to the latter market. There is now another buyer in Cashel and prices are as good in both places.

The price of feedstuffs is the main consideration

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Mr. Pierre McGon—continued.

Mr. Pierre McGon—continued.

for the small holder, and to remedy the present difficulty in this respect the production of home grown stuffs would have to be encouraged.

Though now about 21/4, bonhams had gone up to 36/4, and the labourer was not in a position to buy at the latter figure. If, however, they were cheap and home grown stuffs available these people could feed much better. Bonhams become dear about August when they are purchased at the time potatoes are being ploughed out; cabbage is then also plenty; fat pigs are scarce at the same time. The pigs bought in August are fattened in the winter and sold at a time when the price of pork is usually low. The potato crop in this district, however, had little effect on the number of pigs kept, as very little is grown, the supply lasting about four months only, after which meal has to be relied upon.

He would be quite satisfied to receive £5 for a six months old pig. The cost of a light bonham at three months would be £1 and a strong bonham of about the same age 35/4. The increase in value would be about 15/- per month. He quite agreed that feeding pigs is an excellent market for home grown stuffs.

He had carried out a rough test with "Clarendo" and raw Indian meal, and found the former to give him the better returns. The pigs fed on meal did well but went through the food quicker. He was under the impression that he got more meat with "Clarendo"; but he had not worked out any exact experiments and therefore could not give definite figures. Except in winter all the food was fed raw. He mixed dried grains and meal with turnips in order to swell the bulk. It is practically impossible to get people who have been all their lives accustomed to cook food for pigs to give up this system.

With meals at the average price of recent years he thought that if the farmer could obtain 35/- per cwt. for pork pig feeding would be profitable. Comparing the present price of meals and pork he did not think pig feeding could pay. He himself relied upon Clarendo; he was not conversant with the price of Indian meal. The conditions would, however, be more favourable if all the feeding were home grown. He was convinced of the necessity for additional tillage, especially potatoes, if more pigs are to be raised. There is a number of mills in the district to deal with corn.

Could it be shown that, even at prices now prevailing, pork could be raised for 40/- when buying all the meals, and give a return of 37/- he would certainly recommend farmers to take up the industry; but it would be of little use telling them that a certain quantity of meal will produce a definite quantity of pork. They could not appreciate a fact of this sort from the mere talking. There was a number of small industrious farmers in his district who are ready to adopt the best methods, and it would be an advantage to educate these people on the subject. They should have leaflets delivered to them direct. A few local experiments would also be useful. The instructor should go round to each of these farmers and talk over the matter with him, urge him to use raw food until he saw the results, and induce him to keep more pigs. He would emphasize the importance of a visit from the instructor and that the leaflet should be handed to the feeder before the instructor left. These leaflets should recommend the increase of tillage and the use of home grown stuffs, and point out that before the feeder can buy purchased feedstuffs several people have had to make a profit out of it.

As regards the small farmers, his own belief was that the better course would be to tell them simply that it paid better to grow the feeding stuffs without going into any further detail. Teach these farmers as little as possible about the theoretical value of crops or the cost of raising them, as there are many circumstances which cannot possibly be taken into account. Just let them know the practice that pays best.

The potato crop is usually a good one, about 12 tons to the acre. He agreed that they would be worth 8d. per stone for pig feeding, and that an acre would accordingly give a return of £24. There is no potato trade in the district except to meet a small local demand, for which there is a good price.

He was confident that if all the food could be produced on the farm more pigs would be kept. More tillage provides regular employment, more industry, and cheaper food. There would certainly be an additional area under tillage this year. He recognised that increased tillage required more men, who were now scarce, but the demand will create the supply. If anything could be done to stop emigration there would be no scarcity. Of course wages at present are low.

The small farmer and labourer are the chief leaders of pigs, and as they do not rely upon paid hands the labour question does not affect them. He had himself no difficulty in securing labour; there is a certain amount of scarcity, but conditions are favourable in his district.

The usual wages would be about 6/- weekly with keep, or 11/- without keep. The farmer also gives the labourer a certain amount of assistance otherwise. The daughters of small farmers now object to feed pigs; they look to something apparently higher.

Many of the occupants of labourers' cottages make it a practice to feed two or three pigs at the same time. They consider it more profitable to do so than to feed one only. The accommodation provided for pigs with the Rural District Council cottages was not satisfactory, and the proper authority should be urged to see that suitable provision is made in this respect. The labourer is not in a position to spend money on buildings. Where the cottages have already been built he could not offer any suggestion as to how a pigery is to be provided. In any case these labourers would not have the time or money to do the work. The objection to the Council undertaking it is the cost. There is very little supervision at present as regard the erection of buildings under the Labourers' Acts.

In connection with other cottages there were usually pigsties available, but they were certainly within twenty yards of the dwelling house.

As regards the small farmers and those who are anxious to put up suitable pigsties and out-offices, he agreed that it would be desirable to give loans and other assistance. Many of the pigsties at present are most unsuitable, the floors especially being bad. Though they might know how to go about the work many such farmers are not in a position to undertake it without the assistance of a loan. There are others who would merely require to be given a simple plan and specification and be told the approximate cost. There is plenty of gravel for concrete. Where a pigery could be put up for £4 or £5 there is no need for a loan.

Where the local instructor recommends that a man be given some assistance, an advance of £3 or £5 could be given, along with facilities for doing the work, which, however, there should be someone to supervise. There is an idea that pigs will thrive better in the dark.

He considered that the quality of the pigs generally in the district is good, though some inferior animals come down from the Wicklow mountains. The Large White York boars fed greatest favour. He brought down an Ulster bear from the Dublin Show and kept it in the district for three years, but it was not appreciated. When eight weeks old the bonham was a nice looking animal. There was an impression that there were usually two or three "Bonhams" (small bonhams) in the litter from the Ulster; but the bonhams thrive well. In Cumber the buyers appeared to object to anything in the nature of an Ulster or Black pig. He now had a York boar, which met with much greater favour. His experience in this connection, however, had reference to the two boars only.

More poultry is being kept, but he would not say that they were displacing pigs.

Mr. HARRY SADLER, Linton, Tipperary.

Stated he was a farmer and fed a limited number of pigs. He expressed the opinion that pig feeding is not carried on so extensively in his district as in former years. When tillage ceased pigs were not

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Mr. Harry Sadleir—continued.

Mr. EDWARD CUMMING, Knockliffy, Clonmel.

kept. He believed that they could not be profitably fed when bought-in food had to be relied upon.

The comparatively small quantity of potatoes grown is another cause of the shrinkage. The area under this crop is decreasing, owing to the scarcity of labourers and the fact that there are no houses for the latter to live in.

The usual feeding given to pigs consists of potatoes mixed with meal, but sufficient potatoes are not grown. More tillage would leave more food for pigs; and this is the only suggestion he could offer for increasing the number, as without the offal from tillage the industry could not be made profitable.

Pigs are not fed by large farmers on account of the scarcity of labour. Small holders have gone in more for fowl and cattle raising as well as other employments in which so much hired labour is not required. They prefer to feed a few calves, which they did more profitably. In fact they did not consider that it was profitable to feed pigs at all; prices, however, have recently been better. Then neither the farmers themselves nor male or female servants like the drudgery that attaches to pig feeding; and labourers are so well paid that they do not keep pigs.

There is no breed about his district but the Large York, and it appears to be satisfactory. There were some Berkshires, but the people got out of them.

The serious fluctuations in the price of pork, and the fact that the farmer does not know the weight of pig that the merchant wants are further factors. The cost in price is also objected to, as the farmer cannot understand why a few lb. overweight entails such a loss. He had himself sold three pigs weighing respectively 12 stone, 12 st. 11 lb., and 12 st. 11 lb., and got practically nothing for the odd 22 lb. He was not content with the conditions regulating the home or foreign markets.

A good many labourers' cottages are being erected but they are not all being given to the right class of people. He knew of a lot of seven cottages, two only of which were occupied by agricultural labourers, the others having been given respectively to a postman, a farmer, two small road contractors, and a tailor.

Few farmers have cottages on the farm their own property, but such a farmer can get labourers to come to him where a man without such accommodation would have great difficulty except by paying a much higher rate of wages to some man from one of the R.D.C. cottages. One reason for this is that the farmer is able to give his own labourer—and he was all the time referring to permanent labourers—several perquisites at a slight cost. The casual labourer is very little use. There is rarely any formal agreement entered into. A man entirely dependent upon the farmer for whom he is working is likely to be more careful of his employer's interest than the man in the R.D.C. cottage, who is more independent. In the circumstances he considered that the farmer should get cheap money to build cottages and that every man with a certain area of land should be compelled to provide a definite amount of housing accommodation for labour. He did not think it was the best thing for the farmer that so much money had been expended on housing under the Labourers' Acts. After the first couple of years the holders of these cottages neglected to till their gardens, allowing them to run into meadow. They have no way of manuring or cultivating the ground, and many of them would be as well off without it. Of course if pigs were kept manure would be available for this purpose. As present the labourer sometimes gives the farmer 25 to 210 for an acre of land which the farmer cultivated, supplying the manure.

For men in the R.D.C. cottages (the usual wages 14/- for one half of the year and 10/- to 11/- per week for the other six months).

The R.D.C. cottages are supplied with a small pig-pen; few of the holders, however, keep pigs. Any man who wants to keep a pig will readily put up a house.

Stated he was a farmer and breeder, principally of pigs. The cause of the shrinkage was not quite clear, but might be attributed to one or more reasons such as fluctuations in price of pork, decrease in tillage, scarcity of labour, and cost of feeding stuffs. Pig feeding is not now so extensively carried on as it might be with prevailing prices, as many who gave up the business some years ago when it was unprofitable could not be induced to return to it.

When the price of pork goes down in a bad year it leaves an impression on the farmer which is not easily overcome. Breeding stocks are reduced, and the following year would see the effect. This is perhaps what happened in 1912. Of course fluctuations in price are an annoyance.

The industry is dependent almost entirely upon the small farmers. They both breed and finish the pigs. Some of the larger farmers buy stores only. They are dependent upon labourers, but in any case go in very little for pigs. The small holder usually has his own family to do the work and the labour difficulty does not affect him.

The area under the potato crop in his district had been annually decreasing. The small labourers were relied upon for pig feeding; these are not now available, and it would not be profitable to feed good potatoes to pigs. The general decrease in tillage made pigs scarce, and there is a good demand for them in consequence. Indian meal has been comparatively cheap, but as it is now getting dear, he considered that farmers would be well advised to increase the area under potatoes and other crops for feeding purposes in order to be independent of prices.

The Land Acts have made the country more prosperous, and good prices are obtainable for other classes of stock, to which farmers are giving their attention or profit accrues with much less labour than from pig feeding. If the labourer or small farmer is hard hit in one year he is not in a position to go into the industry again. He is after losing his former stock and has frequently no more capital. He agreed, however, that the man who kept pigs continuously would make money out of it, and this had been his experience over many years. It was the practice of some people to plunge into stock that was paying.

Some cattle are paying better lately, with the result that the land is drifting into grass. The labour difficulty is also a consideration. Were there more tillage the farmer would have much more feeding stuffs for pigs, especially barley. To make the pig breeding industry profitable, however, it would be necessary that present prices be maintained.

The minimum price of pork should be 50/- before the farmer could be induced to feed. The figures which he had heard to-day as to the amount of food required to make a cwt. of pork would bear out this view. Of course if the cost of feeding stuffs went up the price of pork would have to be increased proportionately, but tillage would leave the farmer more independent of prices for foodstuffs.

He kept no records of foods consumed, and he would like to have figures to show the cost of producing a pig. Farmers do not go into any exact accounts, but they have a fair idea of what the cost is. It frequently happens that part of the meal bought for the pig goes to poultry.

There is considerably more worry and labour attached to pigs than to store cattle or the dairying industry, and the returns from the latter are more reliable. He was sending milk to a creamery and the value would be about 211 per cow for a favourable year.

He lived between Clonmel and Cahin. In the latter town pigs can be sold either by live or dead weight (i.e., sent direct to the curer). In Clonmel and other places there were no facilities for sending pigs to the curer and obtaining dead weight prices. There is difficulty in getting a half wagon of pigs direct, and if the full number cannot be secured the freight is too heavy.

When pigs are purchased by live weights 25 per cent. is allowed for offal. He considered that this proportion is excessive on well bred and well finished animals. He had sent a number of pigs to curers and had also seen many killed. From his observation he

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Mr. Edward Cassing—continued.

would say that a well finished pig weighed much better than was expected. The merchants appeared to be striking an average when they decided on 25 pence. He suggested that pigs should be graded into finished and unfinished classes and the question of sets decided on this basis. Of course, when buying by live weight it is not practicable for the merchant to do more than strike an average, but it is a discouragement to the man who feeds well.

Dealers come to Clonmel, but he was not aware that they represented any merchants. They come out to the farmers' places where prices are likely to be good. When they come they look for the best pigs, especially for shipping. Buyers who work for the cures should be expert men, able to grade pigs according to their true value at respective prices for finished and unfinished classes. He agreed that at the same time the proper way to ascertain the weight is the scales. He was surprised to learn to-day that the cull was generally greater than 25 per cent. The good feeder, of course, got a better all round return, but not all that he deserved; he is balancing the cures profit against the man who gave him bad pigs.

It would be an advantage if the cures would arrange their prices weekly, avoiding extreme fluctuations, and send due notice of same to the press or their representatives where they purchase pigs.

To encourage the continuance or extension of pig breeding it should be shown conclusively to be profitable. The profits, of course, are materially controlled by the price of pork. If leaflets were circulated giving figures of the approximate cost of fattening a pig to twelve stone dead weight, taking the average price of feeding stuffs from a normal standard, feeders could form an opinion as to what return might be expected in proportion to the variable cost of feeding and prices then obtainable for pork.

The wholesale price paid for pork by the cures was not at times as high as it should be when contrasted with the price of bacon in Manchester and London markets. At the outbreak of the war bacon was sold at a high price for a few weeks, and he thought more should have been paid at home for pigs. At that time in Clonmel 47/- live weight was the highest, while bacon was 85/- to 90/-. He recognised that that was an exceptional period, but the cures should have given more for pork.

The Large York of correct type, from his experience, is a good pig, if not the best, to cross with the ordinary or native breed of the district, and it gave all round satisfaction. About 300 sows are annually sent to his York boars, even from places where ordinary boars are kept. There was none of the White Ulster in the district; he had seen some of this breed but did not like it, as he considered that no matter how the pig was fed it could not be made to give a nice carcass of firm meat and the hams would not be well filled. He had no experience of the Blacks. The bacon cures had stated definitely that the Black or the Ulster did suit their trade. He thought the County Committee of Agriculture were right in confining premiums to the York.

The well bred animal required less feed than a poor type. He did not overfeed, and he left the sows out as much as possible. He had tried several strains, but only found one (the old Berkshire from Sir Gilbert Greenall) to be good nurses, and he kept to that strain. He had experienced a great deal of trouble with other strains of pure breeds. In this connection he noticed that like hogs like. He got his boars from St. Ann's Hill or Laracor. He had three at present; he had much difficulty in procuring fresh blood. He could select better shaped boars from his own stock than he was able to buy. He charged 2/6 service fee. This had been raised to 4/- in some places where the farmers left the sow overnight, but he would not himself allow this practice.

He kept premium boars, but did not consider that it was very profitable. When the number of sows at 1/- is filled it is difficult to get people to pay the higher fee, and there are frequent misunderstandings. The charge for even the most indifferent boar is 2/- to 2/6. His own strain of pigs is well known and he could get 4/- if he cared to charge it.

Mr. Edward Cassing—continued.

The initial loss of service fees on 30 sows at 1/- each from the ordinary fee of 2/6 is £3 5s.; this amount deducted from the first year's premium of 45 leaves a balance to the owner of £2 15s. The second year the loss on 40 sows amounts to 45, which corresponds with the premium for that year, so that there is no profit to the owner of the boar for keeping particulars, etc., of these 40 sows. He would suggest that the second year premium be also value for 45, or else that the service fee be raised, as the financial help to owners of premium boars is not sufficient to make this scheme a success.

Some of his stock went out as premium animals and some went over the county generally. He formerly bred a larger number, and the bacon cures took many of them for distribution when four months old. He had considerable difficulty in getting the Department to take boars of his hands. In one case he wrote three letters but got no acknowledgment, and the boars were seven months old before the Department took them. About 1912 bacon was dear and he thought the pigs would pay better as pork. It would, however, pay him to get the boars off at 45 when between five and six months old, but seven months is too long to wait for this price. In his district the poorer man takes a bear young in order to get it cheaper, but the ordinary person waits until the animal is six months old.

A local proprietary creamery buys the whole milk from farmers at from 1d. to 1½d. per gallon, and get what they can for the separated milk. Suppliers usually take back the latter, but have to pay 1½ a gallon; outsiders could obtain it at 1½d. This meant that the supplier got only 5d. to 5½d. for the whole milk. Probably not more than half of them took back the separated milk, but it could be sold readily in the town. This creamery does not apparently bother about the butterfat if up to an average standard, but set a regular price, giving something less to a man who sends in obviously poor milk. The creamery tests the milk every week, but if it is not inferior the supplier hears nothing more about it. Of course, the supplier of good milk is at some loss under this system as he gets no extra price. His own dairy stock gave fair yields, and he could get 211 from a cow.

The system of feeding raw meals with milk spaces fuel and labour, and large farmers and co-operative creameries might find it profitable, if present prices for pork are maintained, to fatten pigs extensively. The prospective increase in tillage should help the smaller farmer to do likewise. If he were fattening he would use raw meal more, but for breeding sows and young hogs, he preferred wheat chaff, which he steeped overnight. Indian meal is a good fattener, but not so suitable for young pigs; he would use milk when feeding with it.

It is the practice to sell off all pigs at six months old; they are then usually about 2 cwt. As a rule, labourers kept one or two. They are often not able to purchase hogs when the price is high. When it is low they can get a much better pig for the same money. Pigsties are provided by the Rural Council along with the coops. The plot is generally cropped and a further plot of potato ground is sometimes taken from the farmer, so that there is a fair supply of potatoes for feeding. Indian meal is also used.

More poultry than formerly is being kept, and after some of the bad years for pigs the latter were given up altogether in favour of poultry. Clonmel is not now as good a centre for pig raising for the reasons given. It was found that the business did not pay. If instead of sending milk to the creameries it had been kept at home more pigs would have been fattened.

Mr. P. MAHER, Ivy Hall, Templemore.

Mr. Maher, a farmer, breeder and feeder of pigs, criticized the shrinkage in numbers in 1915 to the successful harvesting of the corn crop, especially barley, for which high prices could be realised. The result was that little grain was kept for pig feeding.

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Mr. P. Maher—continued.

Mr. P. Maher—continued.

while there was a small area under potatoes. In some years there is a quantity of damaged barley, and this is used for pig feeding. In the present year nearly all was fit for the millster.

Owing to the restricted area under tillage as well as the more satisfactory prices for store cattle, pig feeding is not carried on so extensively as formerly. It is doubtful whether it would pay to grow barley for pigs, at any rate on one acre except with the prospect of being able to sell it for malting. The average yield would be about 18 barrels to the Irish acre. Malting barley is now 14/6 to 15/-. Portion of both the barley and oat crop is sometimes kept for feeding to horses and cattle, but not to pigs. Anticipating that purchased foodstuffs will be dear, he thought it would be advisable to grow barley for pig feeding, but it would be difficult to get people into this practice. He agreed that in ordinary circumstances pigs would provide a good market for barley; but if it is up to malting standard it will pay better to sell it.

He had tried oats for pigs, but did not consider it a good business. It is, however, a fine wholesome food and will produce good bacon; it is comparatively dear feeding stuff. A plentiful supply of potatoes tends to increase pig numbers. If there is a good price for the potatoes they are usually sold. After the first acre he would suggest that a subsidy be given to encourage the further production of potatoes.

Month-in feeding, especially Indian meal, at present prices is a great deterrent to pig feeding, and farmers should rely more upon home grown produce to overcome this difficulty.

To educate farmers generally on the subject of pig feeding he would suggest both literature and local experiments.

The decrease in tillage owing to the scarcity of labour, including efficient female labour, has to be taken into account. Farmers always have some permanent labourers, and casual labour is required in the harvest. It is practically the rule to leave pig feeding to female servants, but they do not like this work. Except when at the store stage, the feeding is cooked. The system of using raw food had not yet penetrated to the district. For the past two years pig feeding would pay all right, but he had himself got out of the industry owing to labour difficulties. He could not get men to feed pigs at all; in any case they cannot be spared for this work. Of course, if a man were kept for the sole purpose of attending to a large number he would probably not object, but that system is not likely to be adopted. Such a business could only be carried on by a man who would take a special interest in it.

For large farmers keep pigs. The small holders are the main producers, because they are not dependent upon outside labour. Home labour is always more reliable and economical. No servant will take the same interest in the work. The custom is to treat the hired labourer out to do the regular work on the farm, while the pig feeding, which requires more attention, is done by the farmer himself or some member of his family.

As present probably the smaller farmer is keeping the maximum number of pigs that his circumstances allow. If the number were to be increased on either the small or large farms more labour would be required. If the system of feeding on raw food were introduced a good deal of the labour difficulty would be got over.

He was not in a dairying district. The milking had to be done by man, but they do not like it, as it is done before and after the ordinary day's work. Pig feeding is done about the same time, but men object to attend to pigs at any time. In the creamery district nearest him the separated milk is usually given back to the farmer, when it is fed to calves, until the animal is up to six or seven months old. Of course some of it is used for pig feeding. The ordinary farmer does not know anything about the use of raw materials.

It will be hard to induce the large farmers to increase their stock of pigs under present conditions. The production of fat pigs, however, is essentially a

small holder's industry, as there is much manual labour required, and members of the small holder's family supply this. Therefore increase the small holdings. The larger farmer produces practically no pigs; at present he gives everything to cattle; the latter are paying fairly well, and there is less trouble with them.

The small farmers from the mountains make the rearing of borismans a special industry, and they keep most of the sows. Even compared with 1913 he was under the impression that there were less pigs being kept in his district. He was surprised to learn now that the number over the county was increasing, but he was speaking of his own district, which was not a tillage area. Where there were more tillage there would be more pigs. The merchants did not consider they were getting enough pigs in his district and removed the scales to Thurles. They bought by live weight.

The current price of pork should encourage increased pig numbers. The labour difficulty, however, remained. There are enough labourers, but their efficiency and the interest they take in the industry are not the same. The wages of the ordinary single man is 4/7 or 4/8 a year and all found; this is the usual arrangement. The total cost to the farmer would be about 15/- per week.

The quality of the pigs bred in the district is excellent. The Essex or Large Black cross is most favoured; at least that was his experience in the Templemore district; people pass the pure bred York and send sows to his Black boar. The bacon curers, however, object to the Black, and it is feared that the price is not. Of course, if this pig did not suit the curers' trade they were quite right in objecting, but it is a thrifty animal for the farmer, and he considered that the bacon is a good firm article. He was referring to the first cross, as this is usually a more satisfactory breeder than the pure bred. It reaches about 16 stone weight inside six months, and the York does not equal this. In the store stage the Blacks do well on coarse food such as pulped mangels and pollard. The better bred York would be delicate on the same class of feeding. Most of the sows in the locality are nearly pure bred Large Yorks. Mated with the Black boar they give about eighty per cent. white borismans; in fact it is the exception to have a black after the pure Black boars when crossed with white sows. He understood that the curers objected to even the mottled black; and it is, of course, necessary that the farmers should produce what the curers want. There was a number of a coal black, and half black and white pigs in his district, and a shade of black colour remained when the pork was cured. The pure Essex, however, cured nearly white. He had not tried the Ulster.

The Rural District Council supply good pig sties with their cottages; these are generally held by farm labourers, who, however, do not usually keep pigs; they should have more. These cottiers keep a greater number of poultry, and he thought they were inclined to turn to this industry as it is nicer work for them.

Mr. P. W. HOGAN, Cooks, Horse and Jockey, Co. Tipperary.

Stated he was a breeder and feeder of pigs. He attributed the shrinkage in 1913 to the fact that potatoes and other feeding stuffs were scarce and dear in the previous season; while owing to the railway strike and Foot and Mouth disease restrictions, there was no outlet for pigs on the English market. Feeders had to keep them until they were overweight, and consequently suffered a big reduction in price from the home curers. Prices had, however, come right this year, and the industry is being carried on as usual.

Mixed farming is the rule, and potatoes and other root crops are grown plentifully. There is also a moderate supply of milk, and the people are generally industrious.

Pigs are largely fed both by small holders and labourers. Few are kept by the large farmers, who



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Mr. P. W. Hogan—continued.

Mr. P. W. Hogan—continued.

devote their energies to cattle, for which they grow mangels and turnips. For the past twenty years the large farmer seems to have got entirely out of keeping pigs. He did not think that the present labour difficulty had much to do with this.

In 1912, under the supervision of the County Agricultural Instructor, he conducted some experiments in the feeding of pigs. The first was to test the value of barley v. Indian meal. There were three pigs in each lot, the experiment commenced 24th April and lasted for twenty-seven days. The Indian meal lot weighed at the commencement 28 stones, the barley meal lot 27 stones 1 lb. The pigs were valued at the commencement of experiment by the Instructor at £12 10s. The barley meal was 8/3 per cwt.; it was good sound feeding meal and the husk was taken off; the Indian meal was bought at £1 1s. 9d. per sack. The two meals were, therefore, practically the same price. He gave equal quantities of skim milk, about 2½ to 3 gallons per day. The cost of the feeding was £14 12s. 2d. At the time of sale the live weight of the Indian meal lot was 59 stones 4 lb. and the price obtained from Messrs. Matterson of Limerick was £13 12s. The barley meal lot weighed 38 stones 1 lb. and was sold for £15 9s. 6d. Without charging for cooking or attendance the profit, therefore, was 7s. 6d., but he got a subsidy of £3 10s. from the County Committee. He should mention, however, that feeding stuffs were dear in 1912, and he had to buy 45 stone of potatoes at 8d. a stone, as his own was used up. The sale took place at the time of the railway strike when prices had dropped from 58/- for prime sizeable to 54/-, 51/-, and 47/-; and he had moreover to keep the pigs until they were overweight. In reply to an inquiry, Messrs. Matterson informed the County Instructor that the bacon was good, but gave no further information; though anybody who saw the pigs would say that the barley lot were the better. The experiment, of course, was to test which meal gave the better result, and the question of cost did not enter into the matter. The experiment proved that there was practically no difference between Indian and barley meals for pig feeding.

He had this year carried out another experiment on cooked v. raw food. The experiment commenced in January and lasted 73 days. There were three pigs in each lot; and all had been fed on cooked food before the experiment started. The lot given raw food did not take to it well for the first week. Fine Indian meal and pollard were given—(1) steeped in boiling water; (2) merely damped with cold water and left overnight. The potatoes were cooked for both lots. The animals were given as much as they would eat and the amount was increased each week. The lot fed on raw meal lay down and appeared to rest much better. They gained about 2½ stone over the other lot, which had the advantage to the first weight. Although he met a bad market he was very pleased at the result of the experiment. It proved conclusively that cooking the feed is quite unnecessary. He would recommend, however, that in winter the pigs be kept warm. He would not favour raw food for

young pigs. The older they became the better the raw food lot put on flesh.

He could get barley meal delivered at his station last November for 4/- a ton, and he would be quite inclined to pay that price for it compared with 48/- for Indian meal. The cost of Indian meal would, therefore, need to be under 4/- to be as cheap as the home grown stuff. Potatoes mixed with meals and milk are usually fed to pigs in his district.

The Limerick cures are the principal buyers. Any pigs that go from his district are usually prime sizeable and return the highest price.

The fluctuations in prices are most discouraging. People must accept the low price, as holding the pigs over for another market only makes matters worse. When buying in stores for the next set the price will surely be still. The public understand fluctuations in the price of cattle and do not view them with suspicion; but when they have only about two lots of pigs in the year they might find a difference of 6/- per cwt. in prices for exactly similar pigs. As a result of the price prevailing in 1912 many breeders gave up keeping as large a number as previously.

Pig feeding is carried on simply as an auxiliary to farming. The practice is to buy strong sows and boars and are not bought until there is some food available for them. It is not customary to allow the pigs to run out during the summer; they are fed all through and are sold at between six and seven months old at 12 stone weight.

The Large York is the only class of pig fed in the district. They are good feeders, grow and put on flesh quickly, and make good bacon. No one would buy a black pig in his district.

Where large or small farmers have a small paddock in which to exercise a breeding sow they would find it profitable to go in for breeding. He had never seen more run up the ground. Out of a litter of say ten bombas, half the number could be sold at nine or ten weeks old, and at 4/- each would pay for rearing the litter; the farmer would have the other five free of cost for fattening, and the buyer of the sows could not complain of the cost. At present pig breeding is being carried on by a few people in certain districts who rarely fatten at all.

If the regular return is to be maintained, the one man must be the breeder and fatterer. If the industry were to be taken up with more interest it would become pleasant and profitable, but better arrangements should be made for the convenience of the attendant. The piggeries should be suitable, with a feeding house convenient, and the pigs should be kept clean and comfortable.

In districts in which potatoes are not grown so extensively as in his, more attention is paid to poultry, and pigs are being given up. The former work is more congenial. Men are not engaged at all in pig feeding; it is all done by the women of the house and by servants.

The Rural Council's cottages are supplied with pig sties. As a rule the occupants till the gardens and feed pigs.

## THIRTEENTH PUBLIC SITTING.

TUESDAY, 15TH DECEMBER, 1914.

AT 10 O'CLOCK, A.M.

At the Court House, Portarlington.

## PRESENT :

MR. JAMES S. GEDDON, B.Sc. (Chairman).

MR. R. N. BORN.

MR. FARMER CROWE.

MR. J. WILKINSON, J.P.

MR. O. W. H. ROBERTSON, B.A.

MR. JAMES A. MULHALL, B.D.C., Pass House, Maryborough, Member of the Queen's County Committee of Agriculture.

MR. JAMES A. MULHALL, B.D.C.—continued.

MR. MULHALL, a farmer and breeder and feeder of pigs, attributed the shrinkage in 1913 principally to the failure of the potato crop and the price of barley in 1912. The latter, which was formerly ground for pig feeding, was in that year sold at from 12/- to 18/- per barrel; and Indian meal was very dear, being over 41 per sack. It requires too much Indian meal to make up for the potatoes and barley. With the exception of the last six months of 1912 and the first eight months of 1913 he considered that pig feeding is carried out as extensively in the district and throughout Queen's Co. as in previous years.

In the beginning of 1912 pigs were a fair price; in the following year they were not finished owing to the failure of the potato crop. When the crop is good, thirty per cent. more pigs would be kept. The number of sows that come to his house would indicate the decrease, if any, was of a temporary character only. He had been speaking to several buyers in the county and they told him that they had not noticed any great decrease within the past three years.

There is fair competition in the buying of pigs, but he would like to see more. As a result of the fluctuations, however, people do not know what they can expect and they are dissatisfied with the uncertainty of the prices.

The Department would do well to induce farmers to have weighbridges erected in every electoral division for the purpose of weighing animals for their own information. They required to be pushed a good deal in these matters.

It was formerly the practice to allow a batch of pigs farrowed, say, in May to run out until October and be sold in January or February. That system has almost died out, as it was found that the pigs became overweight and did not command the best price, in fact they had mostly to be shipped. Lately the practice is to finish them at six or seven months old.

When Indian meal can be bought at, say, 17/6 per bag, 24 cwt., many more pigs would be fattened, provided the potato crop is good. When the cost is 18/- and potatoes are 2/- a cwt. pigs would have to realise 45/- per cwt. live weight before they gave a profitable return. If the feeder was doing the work with his own family a smaller figure might represent a profit, but he would not like to pay labour and receive less. If pork could be maintained at a standard price for, say, six months feeding would increase as the farmer would know what to expect. At the present price of potatoes and feeding stuffs he did not consider that it would be profitable to raise pigs at less than 40/-, but the industry would pay at this.

He always used cooked food, but he knew one farmer who had obtained quite satisfactory results from raw feeding. Potatoes are the principal food, and they would be given cooked only. The Agricultural Instructor is carrying out experiments in the feeding of live stock, and if those were extended it would probably be the best method of educating the farmer. Leaflets should also be distributed. In addition

people should be instructed in the management of breeding sows, a subject which many of them do not understand; if they did they could have many more litters. The sow is often let run too long before coming to the boar, and a litter is frequently lost in two years. The sow should be taken to the boar three days after the bitches are weaned. If so mated she will have five litters within two years. He had three sows that had 8, 9, and 11 litters, respectively, so treated. This matter could be mentioned in the Department's leaflets. The holders of premium boars should be provided with a supply of the leaflets to distribute to sow owners; and he believed they would be quite willing to do so. References should further be made to the proper class of sty for breeding sows, and a plan and specification should be given.

The pure Large York crossed with old common breed finds the most favour, but lately the pure bred Yorks are considered best. The Ulster and Large Black have been tried, but did not give satisfaction. He kept pure bred Large York sows, which included a premium animal; they had all given satisfaction, but some of them were better than others. Increasing the number of premium boars of this breed throughout the county would be the best means of encouraging pig breeding. On account of his being a member of the County Committee he could not get a renewal of the premium, but he kept on the boar, and it was now four years old. He suggested that premiums be given for three years; provided there was a sufficient number in the county there would be no danger of inbreeding. Five pounds could be given for the first year and £3 for the two following seasons. The boar might be too heavy for young sows and it would be necessary to have another lighter animal; either that or have a young boar kept somewhere convenient. There would be no danger of farmers bringing back a sow to its sire; they take every precaution to avoid this, as they are thoroughly alive to the danger of inbreeding. The first litters cross might do well, but the remainder would not.

He knew of one premium boar of the Ulster breed that had been placed in the county, but the produce did not give satisfaction and it had to be given up. The bacon owners would not buy the Ulster type when they could get the York. He had two Ulster sows from different breeders and crossed them with the Large York boar, but the progeny though fed exactly alike was uneven; the average of the litters would be seen. This did not happen with the York sow and boar. Neither the Ulster nor the Black is suitable for the trade in the district, and the County Committee were of the same opinion; they had no new applications for other than the York as premium animals.

He submitted a map which he had obtained from the County Secretary showing the location of premium boars, thirteen in all; there were twenty-two county electoral divisions and there should be at least a premium boar in each. They were now too far apart. A number of persons who kept ordinary boars are getting out of them because they are receiving no subsidy; the result is that sows have to be brought long distances to the premium animal. While £250 is allocated for cattle and £140 for horses, £55 only

FORTARLINGTON, 19th December, 1914.

Mr. James A. Mulholl, M.D.C.—continued.

Mr. James A. Mulholl, M.D.C.—continued.

is allowed for swine. This is not sufficient when the importance of the industry to the small farmer is taken into account. The premium boar will take one hundred sows in the year, and an average of six will survive in the litter which would be sold at 45s; at the end of the following period the pig from the pure bred York sows will be worth 15/6 more than that from the ordinary boar. All this (a net increase of £450) was gained by an expenditure of £8, and the money could not be better laid out by the County Committee as it gave a quicker return than any other. There are several applications which cannot be complied with owing to the shortage of funds. When he urged this upon the Committee he was told that the money would have to come from the cattle and other schemes and several members were not inclined to agree to this. He had been under the impression, moreover, that the funds for the different classes of live stock were not and dried by the Department, but he was not quite clear on this point. In Queen's County he thought the small farmers were fairly well represented on the County Committee, but several members of the County Committee certainly did not take sufficient interest in them.

To induce farmers large and small to keep more sows he suggested that the Department inspect and select a number of young sows from three to four months old of the Large York breed from recognised herds and exchange them from one county to another, e.g., a hundred selected sow pigs could be brought into Queen's County from Wexford and be sold at different centres by the local auctioneers, say in February and August, so that they would be fit to go to the boar in April and October. He was confident that a number of farmers who would not otherwise take up the industry would be induced to become purchasers and breeders. There might be some difficulty in getting the required number of pure bred sows; he preferred these, but he would not insist on pure bred animals at first. The pigs in Queen's County are as good as in Wexford, but exchanging them would prevent any likelihood of inbreeding. He acknowledged that a constant change of breeds would answer the same purpose, but the scheme he suggested would, he believed, prove attractive to a number of farmers. His main point, however, was to secure the introduction of fresh blood, and on reconsideration of the matter perhaps the sounder policy was the location of sires.

Pig feeders are greatly handicapped by the labour difficulty, as no servant girl will feed pigs now. Neither will men, except those kept around a yard or one retained for that purpose alone. The ordinary labourer objects to feeding pigs in the morning and evening even inside his working hours. If obliged to do it, he takes no interest in the work.

On holdings of, say, £50 to £75 valuation pigs are principally fed throughout Queen's County. On large holdings, such as grass farms, very few are kept. The small farmers under £50 are the real pig feeders, but they seldom have sows, as their houses and farmyards are generally situated along the side of the public road and very often they have not a paddock or enclosed grass run which breeding pigs require. Breeders should be recommended to have a paddock for sows; it is a decided advantage; and he would like to see a run provided for boars also. When applicants for premium animals are being selected someone should see that a paddock is available.

The small farmers do the work themselves and are not affected by the labour question so much as the larger farmer who may keep a sow but generally does not fatten a number of pigs. The south-east portion of the county is a dairying district and raises a large number of pigs. Bonhams are reared where milk is available. There are few pigs where stone cattle are maintained, as there are no potatoes or milk. Pigs follow tillage or dairying. Cattle, however, are fed on the produce of the large tillage farms, but that produce is mainly roots; very little potatoes being sown, and a couple of pigs only are kept to utilise the offal.

Lately the price of bonhams keeps the labourers from feeding; they hesitate to buy when the price goes over £1. Owing to the increased return that can

be obtained from poultry the labourer is more inclined to turn to that industry, and this would be the case with some small farmers also. The members of his family prefer poultry, particularly turkeys, and the limited capital required to start poultry keeping is a great inducement. There is probably more to be made out of it than out of pigs.

All the Rural Council's cottages in the county are provided with pig houses; these are about four or five yards from the dwelling, the distance being left to the local authority. Both the labourers' houses and offices are kept in order by the Council. Almost every labourer keeps a pig.

On farmers' holdings most of the pig houses are inferior. Many of these holders would be willing to spend some money putting up improved buildings if they got some instruction and assistance.

Mr. BERNARD GUINAN, Lowerdown, Tullamore, representing King's County Farmers' Association.

Stated he was a farmer and breeder and feeder of pigs. He had fed pigs both in Ireland and in America. Was of opinion that, while the number is this year being maintained there would later be a decrease owing to the poor prices at present prevailing, i.e., 40/- as compared with 50/- live weight—he was accustomed to live weight only—a year ago, while feeding stuffs are dearer by 15 per cent. He was aware that as the time he got 50/- pigs were exceptionally dear. The existing price did not encourage farmers to feed pigs. He had 35 at present. He could not understand why the price fell from that prevailing in 1913. He did not consider they could be fed at a profit for 40/-, and he thought that they were now being raised at a loss.

He understood that the bacon curers were represented on the Committee, and he did not hesitate to say that there was a ring amongst them, and that they were not giving a fair price. The farmer and feeder are mostly working for the curer and the shopkeeper. A fair was being held that day in Tullamore and pigs were being sold in Fortarlington; there was a scales operating in each place. The latter is nearer to Limerick or Waterford and consequently the freight is less, yet in Tullamore the curers pay 1/- more; the quotation in Tullamore that day was 41/- and in Fortarlington 40/- . He would like to have an explanation of this. Messrs Deery's and O'Meara's representatives come to Tullamore and there are fairs there which the shippers attend. In Fortarlington the same firms and the Heesons factory are buying; there is the scales but no shippers, and the curers are taking advantage of this lack of competition. He had heard that there were quotations for Irish pork at 14/- less than Danish.

From what he had now heard of the conditions regulating prices on the London market he agreed that the quotations in this country had to fall to meet them.

In Tullamore there is a distillery, from which the slurrage goes through the country, some of it being used for pigs. The Tullamore brewery is a small concern and there is no wash from it, but there is a distillery and the grains from it are good. A number of pigs are fed in Tullamore, but he was informed that the quality is not good, yet the price is 1/- more compared with Fortarlington.

He grew potatoes for feeding; they were selling at 48 a ton. He did not use Indian meal. He purchased pollard at 29 a ton. When in America he had fed Indian corn whole, steeped in water only; so far as he was able to observe this was fully digested. He was not acquainted with the equivalent value of feeding stuffs. He simply contended that the farmer is not getting a proper return. He would want 48/- to 50/- per cwt. live weight before the business would be profitable. He acknowledged that pigs had only gone to 20/- on rare occasions. He had recently seen a number of young ones being disposed of in Tullamore and he was told that there was a poor price for bonhams; it now varied from 15/- to 25/-. He considered £1 a fair price for a nine weeks old bonham, and they were averaging this at present.

PORTARLINGTON, 15th December, 1914.

Mr. ISAAC BAGNALL, Armaghaverry, Tullamore, representing King's Co. Farmers' Association.

Stated he was a farmer and feeder of pigs. He usually raised about 18 or 20 pigs in the year. Potatoes are largely used and the extent of the potato crop influences the number kept more than any other factor. The crop was poor in 1912 and a large number of breeding animals were sold off. This resulted in a shrinkage in 1913.

There is no shortage in the district. The quality of the animals in Tullamore is not good. Better boars were required. There is no premium animal from Philipstown to Tullamore. He had got pigs from Carlow and Caran. Those from the latter place being of a somewhat different type. Both lots, however, did well.

He considered that there was no better feeding than potatoes, which he used together with turnips and pollard. He did not keep any record of the feeding as he raised most of it himself. He generally knew when pigs were paying. He kept them continuously, and he fully agreed that this is the only way in which the business could be made profitable. Going in and out of them is not right. When stock went down the price of bonhams increased, and this prevented a number of people, especially labourers, from feeding. Farmers would to a certain extent be to blame in this matter, but when they have a small crop of potatoes they cannot continue to keep pigs. All the work on the smaller holdings, where the pigs are mainly kept, is done by the farmer and his own family. Labourers will not feed pigs.

Fluctuations in the value of pork are a great discouragement. If they followed the price of bacon it would, of course, be an indication that the curers were paying what the market allowed.

The Rural District Council cottages have good piggeries attached. As a rule the gardens are tilled, and many of the holders are feeding five and six pigs in the year. He was himself surrounded by small farmers, and they were in a bad way as regards housing. It would be a great encouragement to them to keep more pigs if they had better accommodation for the stock. The man with six or eight acres has absolutely no means of borrowing money. He believed that if these holders were given any facilities they would be prepared to spend a reasonable sum to improve their buildings. In many ways this would be well spent money. The small holders are very anxious to improve their piggeries, etc.; any of them who were at all able have already done so; but some assistance would be very useful to many of them.

He did not consider that porkers were taking the place of pigs, but was a very useful asset.

Mr. J. A. ROE, J.P., Johnville, Rathangan.

Stated he was a farmer, and breeder and feeder of pigs. He was a member of the County Committee of Agriculture for Queen's County, but as he had kept premium animals for the past ten or twelve years, he did not wish to give them up, and accordingly did not act on the Committee after he had been notified that he could no longer receive the premiums if he did so.

The shrinkage in 1913 was, in his opinion, due to the low price of pork and the high cost of feeding stuffs in the previous year, and breeding stock was then reduced.

He had no difficulty as regards labour. Where men are constantly employed they do not object to pig feeding. He did not consider that in his district this question exercised any influence on the number of pigs kept.

The portion of the county in which he lived is a tillage area and pigs are kept by all classes of farmers, even the very largest. Another part of the county is under grass mainly and he was not aware whether it was customary to have many pigs there. Wherever there is tillage pigs are kept. He sometimes had sixty or seventy. He grew an extensive area of potatoes, for which he got a ready sale at good prices. He had been supplying one merchant for seventeen years. He had recently sent away 21

Mr. J. A. Roe, J.P.—continued.

tons at 43 a ton on rail at his local station. He had made up to £115 out of the sale of potatoes from an Irish acre.

When there is a good potato and oat crop many more pigs are fed. The poorer people rely upon pigs, and the man who has a good crop will feed ten or twelve. When the crop is bad half that number only would be kept. The usual feeding is potatoes and turnips mixed with meal. The price of Indian meal has also an effect on the number maintained. Bonhams are not weaned until over eight weeks old. The price would then be 25/- to 35/-.

He gave pollard, bran, and linseed gruel. He never had milk to spare for pigs. He had carried out an experiment with pollard and Indian meal &c. No. 1 (standard) alone. The former gave the best results, and there was but 10/- difference in the cost of feeding. The County Agricultural Instructor would be able to supply full particulars.

He did not consider that feeders are receiving sufficient for their pigs in view of the retail price of bacon. In Portarlington a fortnight ago the quotation was 48/- per cwt. live weight. It is now 40/-. He was not aware of the influence exercised on the market by Continental supplies, and he now learned for the first time of the influence of the quotations on the other side. He, of course, realised that these supplies controlled the price of Irish pork and were responsible for the fluctuations here.

The quality has greatly improved during the past twelve or thirteen years, and this is due to the good boars. Bad boars and sows cannot leave good bonhams. He usually kept five or six sows. He sent some of the pigs for sale into Portarlington, and some direct into Messrs. Denny's factory. Most of the pigs are sold off in the month of November. He had both Large York and Large Black, and had the latter for the past eight years. He produced these animals both pure and cross bred. The black sow is a good nurse and when mated with the Large York boar leaves excellent progeny. The first cross from pure breeds is a fine pig. The people of the district look for large sized pigs.

He considered that the main factors in pig breeding were to obtain good boars and sows from a good strain. There is a satisfactory animal from the cross between the Large York and the Black. The sow from this cross is a good nurse. His experience extended to one black sow only, and all the rest of his stock was reared from that sow. The third cross would not be so good as the first; and the succeeding cross would be retrogressive. He acknowledged that it would be difficult to arrange matters so as to maintain two pure breeds for the purpose of securing the required number of first crosses. He certainly thought it would be desirable to introduce an occasional Large Black. He had killed and cured both classes of pig and could find no difference in the bacon.

The bacon curers offered no objection to the black pig, and he was not aware of any difference in the price. He sold a heavy sow recently and for this animal he could get the same price from the Bonanza factory buyer as from the ordinary shipper. He had one pure bred Large Black boar; it was not a premium animal, but it was suitable; some of the progeny were spotted, and some saddle. He had put a white pig on a black sow and with one exception the progeny were all black. The County Committee confine premiums to the Large York. He had one good Large York boar to which upwards of 200 sows had already come during the past year, some of them from eight and ten miles distant.

He suggested that it would tend to encourage the industry if prizes were given for good sows as well as to sitters for good pigs generally. This scheme might be on the lines of that for nominations to mares. Of course, the system of giving premiums to boars should be continued, as this had already effected an enormous improvement. The scheme should be in charge of the County Committee and might be extended to labourers' cottages. In each rural district these prizes might be given; the pigs bought in, say, April and then inspected; and brought to a centre for inspection again when five or six months old, the prizes to be then given to the best pigs.

FORTARLINGTON, 1910 December, 1914.

Mr. J. A. Roe, J.P.—continued.

On reconsideration he agreed that better results would be brought about by increasing the number of premium sows, as people will send sows a long distance to a good sire. He would be glad to see steps taken to prevent the keeping of inferior sows. Something should, however, be done to encourage the keeping of good sows. For the past two years there had been no shows held locally; that is, however, no interest taken in bringing in pigs to shows. The show classes are usually confined to pedigree animals, and those for sows are open.

A large number of pigs are brought into his district from Cavan. They look nice when young, but do not turn out as well as the local animal. They appear to be a cross from the York and the old Irish type, having long ears and narrow heads.

With the cottages erected by the Rural District Council neither a pig sty nor feed house had been provided, and he thought this was a mistake; but there is no occupant of a labourer's cottage in his locality who had not a couple of pigs; some of them have fair accommodation and some of them not very good. These people have to put up the accommodation themselves, with the result that they were not very suitable generally. The small farmers have fair housing and are constantly improving their cottages, and are putting in concrete and paved floors.

He would not say that poultry is taking the place of pigs, in fact he did not think there is so much poultry being kept as formerly. He was under the impression that the market for table poultry is very poor, though eggs are dear but difficult to produce at this season.

Mr. J. W. YOUNG, J.P., Bessley Park, Stradally.

Mr. Young stated that previous to 1910 he kept a limited number of pigs. As his land was rather light for cattle, being reclaimed peaty loam, it would only carry a light class of sheep, viz., Scotch heacy ewes and their produce by a Border Leicester ram. A breeding band of 350 to 400 Scotch ewes as maintained on grass only. He found that cattle did not pay him, and he had some that year given them up, and gave in for pigs extensively, as he came to the conclusion that they would be likely to give the best return.

He had been for some twenty years in America, and by studying the "future" prices of pork he began to see that there would be a shortage, and he thought prices would be likely to go up. American bacon is usually sold in the shops in this country, and he noticed that the prices of pigs closely followed the "future" figures in the Chicago market. The American article had kept up because of the shortage of pigs in America, and he thought that this governed the market.

Except when they were fattening, he noticed that pigs must have plenty of room and exercise, and that sows should have comparative liberty. Following the American practice and theory that pigs, if given opportunity, are largely grazing animals, he, therefore, raised in about 14 acres in which to run out the sows from 1st May to October, when they were brought in. They required less food when kept in this way, did better, and had more healthy litters. He had increased the number of his sows from 2 to 15, and also kept boars. He started with a White Ulster sire, which gave a thrifty pig when crossed with the ordinary sows of the district.

To avoid inbreeding he changed the strain of boar every year. He went to the best bands in the North for this purpose and also got in some sows. He always endeavored to get a strong bristled animal when buying in the North. His pigs were not liked in the district at first as they had less bristles than the people were accustomed to in the York, and were therefore erroneously supposed to be delicate, but they were now appreciated, and sows came to his boars in increasing numbers. The numbers were:—

In 1910	...	...	55
1911	...	...	130
1912	...	...	166
1913	...	...	152
1914	...	...	165 (104 months)

Mr. J. W. Young, J.P.—continued.

These sows were coming to his Ulster boars to the neglect of the Large York sires in the district.

According to the way he could read the prospects of the market he either sold the boars or fattened them. He sold the boars to labourers and small farmers at from nine to twelve weeks old. In 1912 as the result of the failure of the potato crop boars dropped to 14/- . The price varied from that to 27/- . He instance when a couple of pigs of the Ulster type had paid upwards of £1 per month for feeding. The older pigs are bought by shippers, but almost all the ordinary pigs were sold in Athy or Maryborough to the representatives of the curers. In those centres Messrs. Denny had a representative apart from the fairs. He had never heard any complaints regarding the quality of the pigs, as both his own and those sent from his stock fetched the highest figure. He killed all the pigs required for his own use; and when the Ulster and the York were well fattened he could not notice any difference in the bacon. He had but a limited experience of the Blacks.

So long as the farmer is prepared to buy the Ulster sows he thought he should have it. If the curers will not give the top price, of course, the farmer will not keep this class of pig. So far as his experience went, however, they were paying the full price for the Ulster. He would not take the curers into consideration in this matter. The sows had been coming to his Ulster boars in greater number to the neglect of the Large York, as the people say the boars come quicker to maturity. He charged 2/6 as against 1/- charged for the York.

The Large York alone left a coarse class of pig, but when bred to the Ulster type it had a tendency to be strong and quicker fattening. The County Committee should subsidise the York or the Ulster, as the farmer required them. If the curers proceeded to cut the price of the Ulster too severely he would recommend that a dead meat trade be established.

It would be necessary to have two pure breeds to maintain the highest class of stock, as commercially the first crosses are best, but he acknowledged that it would be impracticable to expect farmers to do this. The same effect would, of course, be secured if premiums were given to two classes of sires. He agreed that his representations in this matter should be addressed to the County Committee, but these bodies should be obliged to take steps to insure continuous crossing by allocating a certain number of premiums to each breed.

He had not carried out any experiments to ascertain the weight which pigs would make in a given time; but out of a lot of eight batches of the Ulster type three had gone out when 5½ months old at 16 stone, while the remainder were seven months old before they made the same weight. He used a considerable quantity of mangels and turnips, but had not tried raw feeding. He did not, however, confine himself to any one mixture, but usually finished up with a good quantity of oatmeal. Feed is scarce, and demonstrations in the use of raw feed would be useful. He agreed that it would be desirable to have the experiments carried out under local conditions; the results would then receive much more attention than leaflets or literature.

In his immediate district more pigs are being bred and fed lately. Farmers and labourers rely mainly upon potatoes; when there is a bad crop fewer pigs will be kept. The price of either Indian meal or pork would be a minor matter in such circumstances in interfering with the number.

As the farms get larger less pigs are kept in proportion to the acreage. The greater acreage is kept by small farmers, who also keep the sows. Labourers and cottiers all keep pigs. The big farmer is handicapped by the scarcity of labour, but if he had definite data as to the production of pork from a given quantity of feed he would be more inclined to take up the industry.

Until he enters the market the farmer does not know what weight of pig will be in demand. As a rule top price is given for pigs from 14 to 16 stone; then without warning it will be stated that they will be taken at top price from 15 to 16 or from 15 to 17; the prime weight is sometimes allowed to go up to 18; above

PORTARLINGTON, 16th December, 1914.

Mr. J. W. Young, J.P.—continued.

Mr. J. W. Young, J.P.—continued.

and below the weight required a cut is made. He would endeavour to find out the dates on which these cuts were made; they lasted for about a week on several occasions within the past three or four years. Should a large number of pigs come forward, even within the same year, prices go down. The 14 to 16 stone animal, however, is nearly always in demand.

One of the drawbacks in this country is the comparative absence of a trade in pork for home consumption.

Provision should be made to keep the farmer better

informed as to the number of pigs bred and fattened from month to month in Ireland. In America he understood that the census of pigs was taken every quarter and the fluctuation for "futures" for pork in Chicago. The latter appears in the daily press under "American markets," but few of the smaller farmers see or understand it. Farmers nowadays would appreciate such information because they are taking a greater interest in these matters, and in his district farming had reached a high standard.

## FOURTEENTH PUBLIC SITTING.

WEDNESDAY, 16TH DECEMBER, 1914.

AT 10 O'CLOCK, A.M.

At the Town Hall, Carlow.

## PRESENT:

Mr. JAMES S. GOSDEN, Esq. (Chairman).

Mr. R. N. BORN.

Mr. PARNICK CLARKE.

Mr. J. WILLINGTON, J.P.

Mr. O. W. H. ROULSTON, J.A.

Mr. JOHN MAHON, Ardara, Carlow.

Mr. John Mahon—continued.

Mr. Mahon stated he was formerly a member of the County Committee of Agriculture. He was a farmer; had been a breeder and feeder of pigs. The shrinkage in 1913 might have been due to the restrictions resulting from the outbreak of Foot and Mouth disease in the previous year. A number of sows were then sold off. The restrictions, however, applied to a small portion of County Carlow only, and so far as he was aware their effect was merely temporary.

Whilst he could not offer any definite opinion as to the cause of the shrinkage in 1913, he believed that, compared with ten years ago, the industry was not carried on so extensively. He thought the main reason for this was the increased cost of production, owing to the scarcity and dearth of labour, the higher cost of fuel and purchased foodstuffs, due to the increased market value of farm produce generally. The larger farmers find it more profitable either to market their produce direct or feed to cattle or cows.

In his district labour, both permanent and casual, is difficult to procure and wages are high. Farmers have to come into Carlow town for casual labour, and this is not very efficient. Permanent men are mostly those who reside in labourers' cottages and are paid 10/- to 12/- a week. If kept by the farmer the wages would be 5/- to 6/- and perquisites. Casual labourers are very dear and they will not do any pig feeding. Permanent men have no objection.

Pigs are principally kept by the small holders, who are able to rely upon their own families for the labour required; this is the main reason why they keep pigs.

A shortage of potatoes and roots tends to decrease the number of pigs fed, and vice versa. When Indian meal and molasses are dear people are not so much inclined to feed pigs. The principal feeding is potatoes supplemented by Indian meal. Sometimes crushed oats or barley is used instead of Indian meal. This had been done fairly generally, but of late there is a tendency to give this feeding to cattle. Apart from the price of pork pigs would be fed so long as there is a fair potato crop.

There is a fair amount of tillage, but in one part of the county more than another, and more pigs are kept there. Where tillage farming is the custom pigs are kept, but it did not follow that if there were more tillage more pigs would be raised, especially if there

were a good market for the produce. An additional supply of labour would, however, tend to increase the number of pigs.

The price of pork is a factor in determining the number of pigs fattened. They are sold in Carlow on Wednesday over the scales, and there is a variation of a couple of shillings almost every week, two successive markets being seldom the same as regards the price of pork. He admitted that other farm produce varied also, but not so much, and the price of hens does not fluctuate to the same extent; pork appears to fluctuate in price more than any other commodity. He acknowledged that the variation looked much bigger when calculated at so much per cwt. The remarkable way in which the quotations fluctuate gave the idea that buyers can arrange prices to suit themselves. This was not his own idea, as he recognized that supply and demand regulated the market.

The quality of pigs in the district is, on the whole, suitable, and one hears little complaint from buyers. The Large York is the principal breed, and it is giving satisfaction. He did not think there was a Large Black in the district; there was a rumour that the buyers would not take them, and the County Committee, he understood, now confined premiums to the York.

He would suggest that the amount of premiums to boars should be increased so as to ensure that all the premiums would be taken up and people encouraged to purchase the very best boars.

He understood that pigs would thrive and fatten as well on raw as on cooked food. Owing to the scarcity and high price of labour and fuel it would tend to increase the number of pigs fattened if people could be educated to this fact by means of local experiments, which he believed many farmers would be willing to undertake. The practice at present is to steep the Indian meal in boiling water. Little attention will be paid to hatching alone; it is necessary to bring these matters much more closely to the attention of feeders, and this could be done by the local instructor by means of lectures, experiments, and demonstrations.

If it could be shown that there is a profit to be derived from keeping a large number of pigs, and that a definite quantity of pork could be raised from so much meal, he believed that many farmers would be

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*Mr. John Mahon—continued.*

induced to take up the business. This would, however, need to be clearly demonstrated.

He was connected with the agricultural show in Carlow. With one exception the pig classes are open to ordinary animals, but it is very difficult in any part of the county to fill these classes. He was quite unable to understand the reason as the prizes were substantial. Most of the pigs shown came from local exhibitors.

Pigs are usually sold at about 17 stone live weight, and the animal would then be about seven months old.

The Rural District Council cottages are all supplied with good pig sties. Most of the labourers keep pigs; but some of them complain that the accommodation is too limited for more than one at a time.

Many more poultry are kept, especially by labourers, and these appear to be displacing pigs. He thought that perhaps the return from poultry is quicker.

*Mr. George B. Jackson—continued.*

of special manner he grew large crops (irrespective of quality for table purposes) and these were given after being roughly cleaned. He would not depend upon the smaller or dressed potatoes for pig feeding. He had tried both raw and cooked food and could find no difference in the results. He had carried out two sets of experiments.

There is but a limited market for potatoes and the price is low. When there is a plentiful supply the labourer would be likely to buy a pig to utilize them. Feed, however, is scarce, and if demonstrations could be conducted to show that cooked food is unnecessary one of the difficulties in pig feeding would be got over. He would also suggest experiments in the growing of catch crops as a food for pigs.

To demonstrate the use of raw food some farmers whose reputation in the district would count should be asked to carry out the trials. These should be on the lines of the cattle feeding experiments. It would be absolutely essential that those carrying out the experiments should have weight in the district. The thrifty and the small farmer would do just as well, as his word would carry weight. This method would be far preferable to relying upon leaflets, to which very little attention is paid. The experiments which he had carried out on this point were purely for his own information. Three pounds of barley meal was allowed to each pig, increased later to 7 lb., with approximately a stone of potatoes. He frequently mixed some turnips with the potatoes in order to make up the bulk, but the pigs only got what they would clean up, the meal being increased as required. The pigs were from the ordinary native sow crossed with the pure bred York boar. One batch was sold at 5½ months old and weighed 17 stone each.

He might mention that his experience was that a root invariably gave poor meat. He found a great difference in the thriftness of pigs. More attention should be paid to the type of boar and sow with a view to producing the best class of boars.

He had been working on the principle that first crosses are the best animals. He found a cross from the Large Black to be the most thrifty pig, and they did the best with him, but the merchants boycotted the Blacks and refused to buy them at any weight. He was trying to push this breed in the district, with the result that the curers would not buy any class of pig from him. He had not been aware until to-day that this pig was unsuitable for the curers, and from what he had now heard he felt that he would be obliged to take a different view of the matter, as in the circumstances just explained to him he could not blame the curers for refusing to take the block.

He had experience of the Ulster and Irish cross. He would favour an experiment being conducted in the feeding of the cross from an Ulster boar and York sow. This animal should suit the weights for the local trade and prevent inbreeding, of which there is some now, as there is a tendency in the district to breed from a particular strain without regard to the relationship. The Ulster is not coarse when crossed with the York. The bacon curers take this pig readily, and his own belief was that most of the old Irish pigs were of the present Ulster type.

It is also desirable to encourage the use of home grown instead of purchased feeding. There should be a food value placed upon barley irrespective of its value for mowing. In the cattle feeding experiments barley paid for itself against cake. Similar experiments should be carried out to show its value for pig feeding.

The quality of pollard and bran is not equal to what it formerly was, as improved machinery takes more out of the corn. Owing to the inferior quality of the pollard now sold it would be advisable to have some standard feed for this material. He was doubtful whether the standard percentage of oil and albuminoids was a sufficient guarantee to the feeder, as the native oil is frequently extracted from feeding stuffs and the percentage made up by the addition of a cheaper oil. In regard to a certain cake offered at a Carlow fair, he was unable to obtain a guarantee from the seller that the oil content was the native product.

**MR. GEORGE B. JACKSON, Knockreegoe, Carlow.**

Stated he was a farmer, and breeder and feeder of pigs. He had for some years kept two or three hundred pigs, and had gone into the subject carefully. He now bred and kept a few only to use up the offal about the place, as he could not get suitable labour. He always had a man to look specially after the sows or he would have lost many boars. He believed it was necessary to give attention at fattening time even though good accommodation was available.

Ten or twelve years ago people were in the habit of keeping sows and selling off the boars as young sows; but the present generation is not concerned with this business and it is being given up. None of the young men can be relied upon to give the necessary attention to sows, nor do they understand the handling of boars. The farmer is not in a position himself to superintend all the details. He believed that the difficulty in obtaining the right class of labour for this work was general in Kildare. He knew of several other farmers who had large holdings who had to give up the business for the same reason. He attributed the shortage to the higher cost of feeding stuffs and to the lack of knowledge possessed by the people regarding pigs.

In South Kildare and Carlow he would not say that the small farmers do not keep as many pigs. The labourers formerly kept sows; the young boars were bought by farmers in the autumn to use up the offal after harvest. The labourer had not time to till his plot and the sows were allowed to run out on the road. The farmer now helps in tilling the plot and there is no place to keep the sows. The sons of these labourers have not taken up the breeding side of the industry, and this branch is dying out. He had about twenty labourers, some of them stopping in his own places, others in Rural District cottages. He preferred men from the Rural Council's cottages, as they were more inclined to settle down to regular employment. He considered that there should be some arrangement by which the labourer should be allowed to change from one R.D.C. cottage to another. The Councils do not encourage this at present, with the result that some of the labourers have frequently to travel a considerable distance to work. In any place that he knew of regular pig sties are provided by the Rural District Councils. Much more poultry is kept than formerly; these have the run of the farmers' fields round about, and the feeding costs the labourer very little.

The price of malting barley is up 25 per cent. in the last ten years, and a better return could be had by selling it than if fed to pigs. He had never given milk to boars. As soon as weaned they are able to feed from the trough, and they then get raw food. He never cooked any of the food. He pulped up raw potatoes and mixed them with the meal and left the mixture over for twenty-four hours to ferment. He grew potatoes especially for pig feeding. By the use

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Mr. George B. Jackson—continued.

Mr. James Flynn—continued.

He agreed that the produce from any extension of tillage could always be profitably marketed by feeding to pigs, but this fact required to be brought home to the farmer. Prove to the public that the home grown stuff is the most profitable. They are at present paying more for Indian meal than they are getting for their barley. The district is well supplied with mills and all stuffs can be easily ground. The use of the modern machinery now on the market should be able to overcome the difficulty arising from scarcity of labour for increased tillage.

Were the supply of pigs more regular there would be much less fluctuation in the price. The all-the-year round system should be encouraged, as at present people are going in and out of the business. A representative of Messrs. Denny buys in Carlow. Unless within the year the pigs are not taken except at a reduced price. In fact Messrs. Denny practically confine their buying to certain weights.

There are pig fairs, which are attended by dealers, but it is customary to sell most of the animals on the scales, as this is considered to be the best means of disposing of them. Dealers buy the heavier classes of pig, but this trade is drying out as there are practically no heavy weight pigs disposed of. The price for a heavy sow is exceptionally low. There is no shipping trade, and accordingly that has not to be entered for.

Mr. JAMES FLYNN, Stornoway, Athy.

Stated he was a farmer, and breeder and feeder. He believed that the shrinkage in 1913 was due to the high price of barley in the autumn of 1913, with the result that it was not kept for pig feeding. Potatoes, which are also largely fed to pigs, were at 1911 prices and dear for pig feeding, and pork was low about the same time. He noticed in the fairs at that period and occasionally since that many people were selling off their sows along with very young pigs, a practice which is unusual in the district.

With a certain class of farmers, viz., those with forty or fifty acres, who formerly fattened ten or twenty pigs in the year and depend upon the servant girl to cook the food, the industry is not now carried on at all. No servant will do the work. He understood, however, that some of the larger farmers who tried uncooked food have within the past few years gone in more extensively for pigs. Owing to the higher cost of living for themselves as well as of feeding stuffs for pigs the smaller farmers and labourers do not keep them so constantly as heretofore.

In the Athy district many of the large tillage farmers breed and fatten a considerable number. When the number is big enough to keep one man to attend to them alone there is so difficulty as regards labour; the same applies when a man is kept about the yard; but the labourer engaged out on the farm will not do this work at all. He agreed that there was a difficulty in getting men who understood the breeding side of the industry. It is becoming increasingly difficult to get labourers who specialise in any particular branch. He could get plenty of hands, but the trouble is to get good men. On his farm there were cottages belonging to the Rural District Council; the wages to men living in them were 12/- to 13/-; to those in his own houses 11/- and some perquisites. None of the labourers have a cow and find it hard to obtain milk. It is usually supplied by the farmers to their own houses.

Some small farmers breed, but do not fatten; and vice versa. As a rule, milk is not very plentiful. The skim and buttermilk is given to pigs, but a large number never get any. He was himself giving most of the milk to calves; but if he was going to sell buttermilk he would give them milk to put a finish on them; if he were going to keep them he would not.

He started some time ago to use uncooked food and found that the pigs did well on it. A number of people in the locality followed his example. There is plenty of bag, but owing to the scarcity of labour and the fact that they can get more remunerative employment the turf is not cut, so that there is little fuel for cooking.

To a great extent the supply of potatoes available regulates the number of pigs kept, as with a plenty of potatoes and a fair share of milk pigs can be fattened very cheaply. If purchased foods have to be largely depended upon it is not wise to go extensively into pig feeding as the price of pork changes so often. A number of small farmers only buy pigs when they have food available. He considered that it would be highly desirable for farmers to keep some of their produce for pigs. With an extended area under tillage more stock of all kinds could be maintained and the farmer would be more independent of purchased means; in fact he would not have to buy any. There is an impression that when good barley meal is sent to the mill it is mixed on the kiln and the owner does not get back as good stuff. The farmer has not always sufficient accommodation to store large quantities, so that he cannot have a bulk lot milled by itself.

As the result of a partial experiment which he had carried out he was satisfied that barley meal is as good as Indian meal for pig feeding. Milk generally is scarce, and it is difficult to get milking done properly. There is no creamery, and there is no skim milk available.

All his pigs were from a cross-bred sow and a Large White Ulster boar; they do well, come to maturity early, and fatten quickly. Before the York is fit it is too big to come within the sizeable weight for the scales; when fat it would be about eight months old. He did not think they could be fattened in six months; it would be too expensive. He maintained his pigs in a nice growing condition. The cross from the Ulster sow and the York boar fattened in between seven and eight months and they would then be about 18½ to 19 stone. In summer Messrs. Denny take pigs up to 18 stone. At this time of year they prefer a higher animal. There were periods of the year at which pigs would be finished at six months old. Pigs fattened in spring cannot be finished without considerable expense. He preferred to have the sows farrowing in April and October.

He did not keep a boar, but there was a premium animal immediately available. Up to a year ago Killase gave premiums for Ulsters, but did not do so now. He kept three sows and sold a good number of hockums, for which he had a ready demand. He had averaged 50/- for a litter and did not like to get less. Within two years he had sold four litters from one sow and fattened a litter. The total income from this sow was 404 lbs. He had a sow that gave two successive litters of twenty each. He intended to experiment with the pure bred Ulster altogether. At present the pigs do not come regularly, some following the Ulster and some the York type. He killed one of the cross bred animals for home consumption when about 15 stone live weight, but the meat was practically all soft fat. He certainly would not buy similar bacon in the shop. So far as he could ascertain the bacon cures were not objected to any of his animals, and the people are quite satisfied with them. He preferred a pig with a moderate quantity of hair. He had tried the Large Black, but had to get out of them as the cures would not take them.

The man who keeps pigs continuously secures the profit. Those going in and out of the business will lose money. This was his belief as regards all classes of farming, and an average had to be taken over as long a period as ten years.

He did not know what could be done to increase the supply of pigs, for if they become plenty the price will come down and they could then be fed at a loss only. He acknowledged, of course, that if farmers fed their produce to pigs it would be a profitable outlet.

Mr. JAMES LUNNON, Courtmellan House, Borris.

Stated he was a member of the Carlow County Committee of Agriculture, and represented the Borris Agricultural Association, and the Carlow Farmers'



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Mr. James Lennon—continued.

Mr. James Lennon—continued.

Union. Up to a few years ago was himself an extensive feeder of pigs. He considered that there was a general shrinkage in the number of pigs kept in Ireland, and he attributed this to the fact that, taking into account the market value of farm produce and concentrated feeding, pork did not pay for the cost of production. As people realized this fact there would be a still greater decrease in the number.

He submitted figures which he had obtained from two labourers in his own locality in regard to the cost of raising pigs, but he could not give final returns as the animals had not yet been sold. In the circumstances, of course, his figures were hypothetical, but he would endeavour to supply a complete statement later. The Boreas Agricultural Association had hundreds of people carrying out experiments to ascertain to what extent live stock paid for the food consumed, but the results were not so far available.

Pigs must be bought in the open market, while they have to be sold at a fixed price. The bacon curers have no competition to meet; they have a fixed price which they will not go beyond. He supposed this price was regulated by supply and demand, but he was not conversant with the factors which settled the supply and demand. The retail price of bacon is very different to that which the farmer gets for the pork, and the farmer is not receiving his full proportion of the value. He was convinced that the curer obtained too great a profit on the bacon. He had not gone into the question of what was the return from different parts of a pig in the manner that he understood the curer had to do. There should be much more co-operation between the producer and the consumer.

The conditions governing the pork trade, of which he had just now been informed, were quite new to him. In the circumstances the only remedy he could suggest would be a farmers' organisation to control the output of Irish pigs. He acknowledged, however, that the Irish supplies would eventually have to find an outlet on the British markets and there compete with the produce of other countries.

He admitted that Irish bacon had secured a high reputation, but the home curers should not get all the credit for this. He would like to see the farmers co-operate and establish one large factory for the curing of pigs instead of relying upon a number of private firms. The business should be taken out of their hands and placed in those of the farmers; but he had not gone deeply into this subject. He did not know whether the Roscrea Co-operative Factory was a success, but it was too small a concern. Messrs. Denny, however, pay as high a price in districts where the Roscrea buyers operate.

He was doubtful whether the farmers would be willing to capitalise a bacon factory, but the Government should subsidise a large concern. He did not believe in Government grants in ordinary circumstances, but they should be given to educate people to the utility of such a proposal; and he believed that when they were educated they would supply the money for the undertaking. He would not say that co-operative factories should not be assisted by Government grants; some assistance would be required to put the factory over the initial stages. The Government were bound to take into consideration the interests of the community as a whole and should not have undue regard to the interests of individuals. He admitted that if he were engaged in business himself he would not like the Government to assist anyone to compete against him. But tillage is decreasing and there is a strong tide of emigration, which would show that industry is on the decay. The great majority of the population is dependent upon agriculture, and the Government would be justified in expending public money in establishing any industry for the general good of the country, even though by doing so they were crushing out private enterprise. He would go so far as to say that the Government should be prepared to do an injustice to an individual if it was in the interests of the majority of the people. The population is mainly agricultural, and were the Government fully representative of the people the interests of agriculture would be better looked after. There is not a single representative of Irish agricultural interests in the House of Commons to-day.

The aid which he suggested should be given to establish a factory would be in the nature of a loan, guaranteed by the shareholders of the co-operative society by their corporate capacity. Bacon curers and traders should be excluded. These loans might also be guaranteed by the ratepayers in the same way as those for labourers' cottages. The banks had advanced up to £1,000 for a local co-operative poultry society on the security of four or five signatures.

In his own district there would be five or six thousand cows; he could not understand why a creamery was not started, as the present system tended to encourage the production of factory butter. The Department through their instructors are upholding the system of factory butter-making, the instructor going round to the farms to show how the butter can best be made. This is sold to the local buyer, and is later mixed in a factory; it sells at £1 per cwt. less than the creamery. The quantity sent out by Purcell's Pool or otherwise to private customers is very small. He admitted that the instructor was employed to teach people how to make butter of a better quality for home consumption, and that any trade that could be established in this commodity with the consumer direct would give a more remunerative return than if it were sent to the factory or even made in a creamery. Of course, where the home made butter was giving a good return he would not recommend that the milk be sent to a creamery.

On reconsidering the matter he acknowledged that the instructors are teaching the people to make the best quality of butter at home to secure customers for that commodity, and that they were endeavouring to improve the quality generally. He would say further that the Department are not opposed to the co-operative creameries, as he recognised that they were affording a certain amount of assistance to them.

From his reading of the reports of the butter market and from his own experience he had come to the conclusion that the greater proportion of the butter made under the present system is sold as factory butter at £1 per cwt. less than the creamery product. From the wider point of view, in order to have a standard article, he considered that all the butter should be made in the creamery. He would do away entirely with the making of butter at home, and there was no need for the itinerant instructors in butter-making. In order that it might be profitable for the farmer to send his milk to the creameries it was necessary that there should not be more than eight miles apart.

In his belief the bacon curers are not giving sufficient for pork, and he would have little hesitation in saying that they were parasites on the agricultural community. He admitted that they were giving considerable employment. If it could be shown that they were giving the best possible price for pigs, of course, he would admit that they were doing good work, but he did not believe they were doing so. He recognised that the scheme which he had put forward for the establishment of a co-operative centre for bacon curing was hypothetical, as he knew of no similar establishment in operation, and that the existing concerns were in the country and were an established fact. He was not in a position to furnish any figures to show that the curers were securing an undue amount of profit. He obtained his impression from the fact that they appeared to have become rich men, while the Irish agricultural industry is on the decline and the food that tillage produces does not leave a margin for profit when fed to stock.

Mr. JOHN KIRWAN, Ballystighe, Berria.

Stated he was a farmer, and feeder and buyer of pigs. In his opinion the shrinkage was due to the high price of Indian meal in 1912, combined with a bad potato crop. Feeders found the industry unprofitable and many of them lessened their breeding stock, hence the decrease in numbers in 1913. Feeding did not fluctuate so much as pork, but he considered that it had a greater influence on the number of pigs kept. The current price of pork is only a

CARLOW, 16th December, 1914.

Mr. John Keenan—continued.

Mr. John Keenan—continued.

slight factor. Provided there is a plentiful crop of potatoes and Indian meal is not too dear pigs will be kept to use up the offal about the place.

Pigs are not fed so extensively in the district as formerly for the reason that less potatoes are grown and the cost of mill stuffs has gone up. The potato crop is an important factor, but the price of mill stuffs is still greater. Wherever there is tillage pigs will be kept. There would be practically none in a grass area.

The smaller farmers are the main support of the pig industry. They grow but a limited quantity of potatoes, the large proportion of which, however, is used for pig feeding. The large farmers look more to the raising of cattle. He considered that it would be useless to urge those men to get into pigs, and no reasonable offer would induce them to keep a sow about the place. There are two classes of large farmers—(1) the man who had an extensive area under tillage, he had not time to devote to pigs; (2) the man who is practically a rancher only.

The smaller holder could not undertake more tillage because he would not have enough labour. He is at present probably growing all that his circumstances permit. The labour of his own family usually suffices for the holding. When the crops are grown and harvested they have frequently to be sold off at once to meet the farmer's liabilities. In any case there is rarely sufficient storage accommodation, while Indian meal is as good feeding as the home grown stuff and would work out cheaper.

Beacons are cheap from March to August because feeding is scarce. From August onwards feeding is more plentiful, and they will be bought practically regardless of cost. When they are done, however, some of the smaller breeders are deterred from buying. When cheap, a number of the sows will be sold, with the result that young pigs are scarce later. Breeders would do well to have beacons available when the price is high, but they do not generally do so.

Three-fourths of the number of pigs in the county are to be got around the Borris district—from Morris to the boundary of Westford. His own is not a noted district for them. The breed is the old Irish without any cross. He was informed by Messrs. Denny's representative that there are no better pigs on the market. They are most suitable for the cover, and good thriving animals for the farrow. There is very little of the York blood in the district. The native breed to which he referred is mainly of the old Irish type. The premium borne placed out by the County Committee would undoubtedly in the course of time leave practically pure bred Large Yorks only, but there are not many premium bears in South Carlow. The old breed is preferred there. He would suggest to improve the native breed by selecting the best of the litter of both sows and boars from men who are known to have an excellent type.

One of the drawbacks to the industry at present is that there is not a continuous supply of feeding. When the potato crop and farm offal are finished the pigs are sold off. The only suggestion he could offer with a view to extending the industry would be to encourage the production of cheap food for the small holder. He would allow no flour in, only whole wheat, and have all the flour used in Ireland milled in this country. There would thus be brought within the reach of the feeder a large quantity of cheap offal such as bran and pollard that he cannot obtain at present. This would, of course, require legislation, but it would be in the general interest. He did not think the price of bread would be increased in consequence.

He was not aware until to-day that a large portion of the bean and pollard from the mills of this country was at present exported owing to the better price that could be obtained for them abroad. This quite altered his view of the subject.

He bought pigs independently and sold them to the bacon cures. His competitors are the shipper and live scales, and he found that he had competition enough to meet.

## FIFTEENTH PUBLIC SITTING.

THURSDAY, 17TH DECEMBER, 1914.

AT 10.30 O'CLOCK, A.M.

At the Court House, Dundalk.

### PRESENT :

Mr. JAMES S. GORDON, B.Sc. (Chairman).  
Mr. B. N. BORN.  
Mr. PATRICK CLUNE.

Mr. J. WILKINSON, J.P.  
Mr. O. W. H. BACULSON, A.I.

Mr. PATRICK O'CONNELL, Bacon Curer, Dundalk.

Mr. Patrick O'Connell—continued.

Stated that he was representing the bacon curing interest, but was not solely engaged in that business. In the immediate vicinity of Dundalk he had noticed a falling off in the number of pigs being fattened by small holders during the past five or six years. He attributed this to the rural districts to the high price of feeding material, and in the urban district, where the falling off is greater, to the high price of feeding material as well as to the increasing restrictions of the Sanitary Authorities. This applied principally to labourers in the rural districts and small householders in the urban area. The decrease in the rural districts might be due to the fact that many of these people, including women, who formerly kept pigs were getting more work in the urban area.

His was a tillage district, and he would describe 50 acres as a large farm, and holders of this area and

upwards also kept a fair number of pigs, but they are kept principally by somewhat smaller farmers. The decrease was noticeable on the holdings of under, say, 10 acres and those of the labourers, but he divided the latter into two classes: rural and urban dwellers. The latter are chiefly affected by the high price of feeding stuffs and the sanitary restrictions, which were yearly becoming more stringent. He quite agreed, however, that they are necessary. He could not say that the number of pigs kept showed a large reduction. The pigs must be a certain distance from the house, but provided they are properly kept he did not think the regulation regarding the distance is too rigidly enforced.

He bought in the local market small dead pigs only, about 10 stone weight, and the small holder's pig suited him. He bought about 20 weekly, and these

DUNDALK, 17th December, 1914.

Mr. Patrick O'Connell—continued.

Mr. Patrick O'Connell—continued.

were cured. Eight or ten years ago he could get any number, but he had greater difficulty in procuring them now. Most of them were fed in the urban district within three miles of the town. In the spring this pig is more plenty. Some years ago he could get his supply in September and October. Many of his former suppliers now finish the pigs to higher weights, and this would largely account for the falling off in the number, as the feeders do not need to have so many to get the same return. He acknowledged also that there is other competition for the light weights and that a number might be taken to other factories, but he could not say whether they were going elsewhere in increasing numbers. He could offer no opinion as to the decrease or increase of pig numbers other than of the class which he required, i.e., small weights. Although he could not get the size he wanted, he recognized that the quality of the pigs sold is good. He did not know what breed is kept. There are very few blacks exhibited, and he objected to its appearance when finished, as did also his customers.

He had never known of a combination amongst merchants, but at times he had seen a buyer with three or four assistants make a ring around one or two carts of dead pigs, a practice which he considered would be unfair to the small holder. This buyer offers a certain price, and will not leave the cart: one of his associates comes along and offers a lower price, and another does the same. The seller thinks he has had all the buyers in the fair, gets tired, and eventually gives his pigs under their market value, and is discouraged at the return. The independent buyer is not given an opportunity to come in. It is the poor small holder who suffers. These assistants would be in the employment of one man, and might include one local individual who might be described as a bully. The buying is not confined to Dundalk cures, and he could not say whether any of these people represented the cures. It would probably happen with one or two buyers only, but it is not infrequent. Of course, if the seller cares to wait he can get rid of these blockers. Such buyers do not try this practice on large men, so that it is a grievance of the small holder or one pig man.

Another frequent and objectionable practice on the part of buyers is to mark a carcass before the seller is satisfied with the price: no one else will then buy it, under the impression that it has been sold. This would be done by an independent buyer purchasing to the best advantage who wanted to sell the pig again, or he might be an agent of the cures. The seller is rarely aware that in such circumstances the buyer is legally liable to pay the sum asked, but the difference in price would not warrant going to law. There is no market authority to deal with the matter; there is only the weight master, and he could not interfere. He knew of one instance where a policeman was brought on the scene and the buyer surrendered the full value, but few people will go that far.

Another grievance of the small seller is the method of calculating the price. Any odd pounds over the quarter weight is only allowed for at the nearest half-penny per pound under the price paid per cwt. If the weight of the carcass was 1 cwt. 25 lb. and the price 46/6, this would not be quite 52, per lb. and the 25 lb. odd would therefore be paid for at the rate of 44d. only. This would not be a serious item to the man with 10 or 12 pigs, as the odd pounds over the quarter on the bulk lot only are calculated in this way, but in some cases it would mean 1/- less to the man with but one pig. If the seller demanded the full price he might get it, but he would have great difficulty. He would suggest that the Committee recommend the discontinuance of this method of calculation and that the amount be made upon the full price. The custom is well understood in the trade, but it is objected to. It had no material effect on the industry, but it gave dissatisfaction and this always reacted.

The Dundalk market comprises about 550 carcasses weekly, most of which go to Belfast and other northern towns, being bought by 10 or 12 buyers, mostly representatives of the bacon cures; there are also independent buyers, and the market is practically over

in twenty minutes. The competition is too keen to allow of any ring; and the cures are anxious to get all the bulk they can.

The dead meat market had been started in Dundalk perhaps twenty years ago. Previously all pigs were sold alive, but the latter system has been ousted by the dead meat trade, which has also encroached on the live market farther south; and despite the minor difficulties to which he had referred, it is an advantage. The main drawback is that the pig cannot be brought home.

In the south the system is to post up the price, but there is no such declaration here when the market opens. There is only one scale and that is the market scale, and the price paid varies amongst the buyers, but the difference between maximum and minimum is not very large. It is a case of supply and demand as well as quality; there is no absolute hard and fast rule.

Mr. JAMES WHITAKER, representing Messrs. Lamben Bros., Ltd., Bacon Cures, Dundalk.

Stated that while the trade of his firm in the south was in live pigs, they took them both dead and alive in Dundalk. The live scales, which operated mainly in the south, though not in Cork itself, did not apply to him as he bought entirely by dead weight. He took pork from the market in Dundalk, but the majority of the pigs which he purchased in County Louth would be brought direct into the factory by the feeders. The dead weight price is quoted, the pig is killed, the calf turned out and the carcass weighed immediately; the sellers can come in and see the whole process, and he believed they were quite satisfied. This is exactly what is done by his firm in Cork, except as regards pigs bought by live weight outside the city. Of the two methods he preferred the live weight, because he could handle the pigs better. In bad weather the home killed pig does not always come in in good condition and the curing cannot be so well done. The home killer frequently does not do the work properly and has no suitable accommodation for storing the carcasses, so that they are sometimes not in the best condition when they come to the market. The factory is in a better position to deal with pigs. In the winter, of course, it does not make so much difference.

Calculating the dead weight, he paid 1/- a cwt. less for the pig brought in alive than for the pork in the market, as he took into account the cost saved to the seller by not having to kill at home. He considered that his firm was paying the full market rate. Compared with the dead pig the live animal is good value to the cures, but at the same time the farmer is as well off.

He was not dependent upon the local supply of pigs, and he had often to pass the local feeders for live pigs, as he could buy to better advantage in the West of Ireland. His price is ruled by the market in the district. Sometimes southern prices are lower than those prevailing about Dundalk, and vice versa. He could get more pigs alive from local feeders if he paid the full market quotation, but he could buy cheaper elsewhere at times. He preferred to buy to the best advantage and wherever it suited him. The farmer knows the price at the factory, and the quotation is usually given for a day or two in advance according as the market quotation can be anticipated.

In the West the pigs are bought principally by hand, and his buyers use their own judgment as regards weight. Some of his buyers are paid by salary and had nothing else; others are jobbers. He told them the price he would be prepared to pay for the pigs from a certain fair; and this was allowed to them after the pigs had been killed and weighed. They buy all the pigs they can, and he took all they brought. Of course, he knew the men he was dealing with. He gave the buyers a cheque when they were going to the fair and they filled in this for the amount they wanted. The shippers are competitors, as are also the other cures, and there is just as much competition buying alive as dead, as the shippers are close bidders.

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Mr. James Whitaker—continued.

Mr. James Whitaker—continued.

Grades are not too closely adhered to, up to 7 lb. being occasionally allowed, and a customer is not usually out for a few lbs.; neither is this done with his buyers, as there is a certain amount of give and take. If the pigs had to be bought by his buyers in the future at a price somewhat above what he had quoted he would not see them at a loss; they were given a certain latitude both as regards grades and price. The merchants were far stricter in the south.

When buying in the dead weight market he took the carcass as it was. He did not post up any price, but merely followed the market. His prices were not regulated by the London quotations, but according to the price that ruled locally for pork. Of course, the general mode of procedure is to follow the London market. The trade carried on by his firm in their Dundalk branch is in roll bacon, and quite different from that of the Cork house. He did not sell any long sides. In Cork they had to follow the London market closely. In his opinion the rise and fall in London would be entirely dependent upon the Danish supply, which is at least three times as much as from all the Irish cures together. It is simply a case of supply and demand, but the fluctuations caused thereby do not affect the price to the same extent in the north of Ireland as in the south. The long side and the roll bacon are two different trades with two different markets, and the fluctuations would not affect each trade equally.

The grades he required were much the same as those prevailing in the south; and he paid top price for 1.1.0 to 1.2.14. He had another grade, 1.2.14 to 1.5.0, and a pig weighing 1.2.15 would come into top grade. There might be prices for three grades. Anything from 1.1.0 to 1.2.14 is the size favoured; that grade would last until coming on to summer, when heavier pigs are needed; 1.2.0 to 1.2.14 would be the grade later. He had the light class from, say, October to May. The grades are practically similar for the same periods during each year and are the sizes which at that particular season command the best price. It is recognised that a couple of months before the end of the year the lightest pigs are in demand for Christmas hams, but this is only a very brief trade. As a general rule there are practically two grades, viz., up to 1.2.14, and from 1.2.14 to 1.5.0, only which command the highest price, one for summer and one for winter. This is well understood. Pigs outside these zones are subject to a cut. There is no cut on dead meat. He had the price for pork for every week during 1914.

For the roll bacon his chief market is north of England. It frequently happens that trade in rolls would be good and the southern trade bad; and vice versa. The roll trade competes more with the American product, which is not so much affected by the London market. What affects the rolls is the north English trade. Withshire bacon cannot be held long. Of late years the buyers who used to confine their buying to the ordinary rolls buy the stoned sides and roll them when they can turn out roll bacon cheaper that way. If they can buy rolls made from Danish sides cheaper than the best Irish rolls they will take the former. When there is a big glut of Danish stuff it is bought and rolled, and that has a bad effect on the Irish roll trade. The consumer does not know how the bacon is turned out. All the Danish comes over green and is smoked in England. It is bought for rolling before it is smoked. The skin of the Danish pig is not too thick, as after being stoned it is scraped. It is much easier to cut the skin of a stoned than a sealed side of bacon.

The York pig is ideal for the stoned bacon, but unsuitable for the roll. So far as the breed here is concerned he had not much to complain of. Twenty years ago the pigs were deep and fleshy. Since then, following on the introduction of the Large York, they are more suitable, but not for the roll trade. He drew his pigs from a large area, buying all over the west, but he did not go farther north. The western pigs were quite suitable for the roll bacon; the local pigs, he found, were too largely fed on graine. The type is not so good, as the southern cures have spent a lot of money improving the breed to meet their own

special requirements. At the same time he had a good trade outside rolls and for this the western pigs are suitable. The pigs in Louth and Monaghan are more suitable than those from the west for the roll trade. Mease alone does not produce very good bacon.

The price of carcasses in the north and south alternates. For the last couple of years at least they have been making a better price in the north. Bonhams are usually sold at from eight to ten weeks old, both in the north and south. There is a class of people who keep them for stores, but this is more general in the south. The pig in the north is 1½ cwt. at 6 to 7 months old. In the south the weight would probably be something more. Pigs are fed continuously in the north, and this means a greater production. As regards the comparative prices, he would say first that the calf is approximately 25 per cent.; then taking the dressed meat weight in the north it will generally be found that the price is higher than in the dead meat markets in the north during the past few months. It costs the seller 2/- to market the pork, and his factory only deducted 3d. to cover the killing, etc. Taking the year round, prices are higher in the south than the north, and the discrepancy between the two prices, when due allowance is made for dead and live weights, is apparent only. From inquiries he had made he was informed that 25 per cent. was the proportion allowed off live weight, and it is the proportion ruling both in this country and England.

He attended himself the dead meat markets in Dundalk. He did not know of anyone who would resort to the practices referred to by Mr. O'Connell, and he believed that these very rarely occur. Tangles or blockies would not be countenanced by the legitimate traders. There would be up to twenty buyers representing different cures. A firm requires to have several buyers in view of the fact that the market is often over in ten minutes. For this reason also there is no time for the practices referred to. He certainly thought that so far as selling is concerned there is nothing to complain of. As a rule the buyer will not mark a pig until it is bought, but he is frequently in a hurry and the countryman is sometimes very slow. Where any difficulty arises, of course, the buyer pays the full price asked to avoid further trouble.

As regards the price of the pounds in the odd quarter, if the rate were 41/6 the price would be 4d., and if 42/- it would be 4d. per lb. This only applies to the odd pounds in the quarter on the gross weight. The practice probably originated years ago from the want of time and disinclination of the buyer to go into fractions. It is a custom of the trade and is fully understood, though he recognised that it was against the seller, especially the man who had a small lot.

He occasionally fed a large number of pigs, but never kept any records of the quantity of food consumed. There is a decided difference in the thriftiness of pigs, but he always considered that if an animal made eight to ten pounds in the week it would be very good. He had used both raw and cooked foods, and his experience was that raw food invariably gave the best results. The most conclusive way to educate farmers in these matters is by means of local experiments. With the majority of people literature counts for very little. He referred to the fact that on an occasion when the bacon curing industry was on the decline the owners gave out sows and young pigs free on condition that the persons receiving them would keep records of the feeding and weights. He had been in charge of the returns, and the results showed that after a certain time the pigs gained 8 to 10 lb. a week. By this means it was demonstrated to the farmers that the pork could be produced at 40/- per cwt., and that anything over that figure was a profit. Meal, however, was then about 25 a ton only, and there was no separated milk. All the feeding was taken at current market rates.

So far as the roll trade is concerned, he would recommend that premiums be given solely to Ulster pigs, and for the long side trade to Large Yorks. His own personal opinion is that for the long side there is nothing more suitable than the Large York. From the description that had been given to him of the Ulster he believed it should be suitable for the roll

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Mr. James Whitaker—continued.

Mr. Alexander A. Watters—continued.

trade, for which ninety per cent. of the pigs bought in his district are required. In short, the premium bears should be confined to animals that suited the local trade.

A factor that had an important bearing on the supply in his district is that many small pigs, perhaps ten weeks old, instead of being fattened and finished off in this country are shipped to England for immediate killing for fresh pork. Humsbreds are shipped from Dundalk for the Liverpool trade. If it could be stopped it would immensely improve the supply of finished animals, as when small pigs come to a reasonable price it would induce people to buy for fattening. These young pigs are sold for about 22/-. Of course, the breeder will sell to whoever pays him best. The dealer does not, however, usually give more than the feeder. He acknowledged that this additional outlet provided competition and maintained a better return for the breeder, and he recognized that it would be very hard on the latter if the trade were interfered with. He would prefer, however, to see the pigs fed and cured in this country.

He had often asked his suppliers why more pigs were not kept, and the reason most of them gave was that they cannot get either male or female servants to attend to them. He had made inquiries in Dundalk and in Cork with the same result. In the hiring fairs here the first question is whether pigs are kept, and the labourer will go where they are not.

If pigs were maintained under proper conditions there would not be the same objection on the part of servants. At present the conditions are such that servants do not like to have anything to do with them; and in the circumstances he considered that this objection is natural. He thought many farmers were to blame in the matter; they will pay far more attention to the housing and care of any other stock. Under fair conditions, the pig is a cleanly animal.

The principal breeder and feeder is the small farmer, with under, say, thirty or forty acres. The large farmers do not go in for the industry at all. Most of the small farmers can depend upon their own labour, but even some of the very small men have to employ outside hands. The labour question, however, does not affect them to the same extent. The large farmer who formerly kept a lot of pigs has given them up simply because he cannot get servants to attend to them. On even the large holdings the accommodation for pigs is not so good. He agreed that it would be very desirable to give the small holders some advice and assistance in the erection of suitable pig houses, and to supervise the building. It would be a material help to the industry.

Leath is mainly a tillage county; potatoes are extensively grown, and are the principal food for pigs. A bad crop would certainly affect the number kept. The large holders might perhaps best be induced to keep pigs by having the use of raw food demonstrated to them. If this system were generally known he believed that many more farmers would take up the business. He had succeeded in getting a number of such farmers to engage in it by proving to them that raw food suffices; of course, the potatoes are cooked; if they can be used raw it would be a still greater advantage, and would make a big difference, as potatoes are the staple food.

He did not think poultry interfered with the number of pigs kept.

Mr. ALEXANDER A. WATTERS, Bacon Curer, Dundalk.

Stated that he was appearing on his own behalf only. He agreed generally, however, with the evidence given by Mr. Whitaker. He could not account for the shrinkage in 1913.

Pigs are fed principally on potatoes. The crop in 1913 was poor. In the autumn of 1911 and beginning of 1912 the price of pork was low, and he agreed that these factors would result in decreasing the number of pigs kept in the following year.

He submitted the following figures as regards prices paid for pork. The high price in August was due to the war scare:—

1913.	For cwt.
December, ... ..	58/-
1914.	
January, ... ..	63/-
February, ... ..	63/-
March, ... ..	59/-
April, ... ..	60/-
May, ... ..	62/-
June, ... ..	62/-
July, ... ..	66/-
August, ... ..	55/- & 58/-
September, ... ..	60/-
October, ... ..	56/-
November, ... ..	67/-

Though it happened this year, pigs are rarely dearer in January and February than in summer. The American supply had something to do with it.

The supplies from Denmark are constant, and enabled that country to hold the market. To a certain extent if the Irish supplies were increased the price might be lower; and if supplies were regularly maintained there would be almost a standard price for bacon. A better standard could be maintained here and the trade could be better held as against Denmark.

He agreed also with Mr. Whitaker as to the type of pig required. He believed in the Ulster. He had some of the Yorkshires, and they were so unsuitable that he had to ship them alive to Liverpool. They were coarse and unfinished. The County Committee should confine premiums to the Ulster boars.

When houses were built in the town for the small holders it was a great mistake that no accommodation was provided for pigs. There was plenty of space available if the buildings were properly laid out. The number kept by the small urban dwellers had decreased owing to the operation of the sanitary laws, but these laws were essential. Much of the difficulty could have been avoided had proper provision been made when the new houses were erected. Many of the pigs kept about the town are fed on grama, with the result that the bacon produced is not so good. He bought all his pigs alive; they were brought into his premises, and killed. He paid according to dead weight, so that he had the opportunity of examining the pork before paying for it; but even if the carcass was quite unsuitable it was often out of the question for him to end the price. It would perhaps be a poor man that would be cut. He did his best, however, to induce feeders to give him an improved class of pig. The distillery grates are used for four or five miles outside the town. The pigs fed on potatoes and afterwards on oats are the best.

Most of the Rural District Council's cesspools kept pigs.

Mr. W. V. DOWDALL, J.P., Teetara, Dundalk.

Stated he was a farmer, and breeder and feeder. On reviewing the matter generally he considered that the decrease in the number of pigs kept in Ireland was due to the fluctuations in prices. He agreed that the main shrinkage was in 1913, and that the figures had now come up to normal. Potatoes are the staple food; the crop in 1912 was bad, and this had an effect on the following year.

His practice was when pork was high to buy in pigs, and he would have to pay dear for them. By the time he was able to sell the pork it had come down to a much lower rate. He admitted that there is a great deal of in and out feeding of pigs, and that the man who keeps them continuously makes the most profit. People feeding cattle keep them all the time as a matter of course, as they did with most other farm industries. They can, however, get much easier into and out of pigs.

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Mr. W. F. Dowdell—continued.

Mr. Edward W. Lockhart—continued.

The fluctuations in the price of pork take place in Dundalk market without any apparent reason. When the price is high a larger number of pigs is killed, and when these come on the market following it reduces the price. This happened in September, and when sellers asked the figure that prevailed in the previous week the buyers walked out of the town. They eventually came back and bought at their own figure. He recognised, however, that the time was exceptional. When the pig is killed it must be sold; there is no other outlet for it. The pig can be brought to the factory alive, but that practice, he thought, was dying out. He was convinced that there is a combination amongst the bacon curers, and that they arrange prices before they come to the market.

He had no proof that there is a combination amongst the buyers; it was simply his opinion. He could not acknowledge that prices were regulated by the quotations in London as indicated to him now; he maintained that this is not the case.

If there is a small supply on one market in Dundalk the price goes up; the next may be a big market and the price will go down. He had seen a difference of 5/- to 6/- per cwt. in two weeks. He was not referring to August and September last, but to prices within the past two or three years. This had happened to himself. He could not give the dates. The price varies from week to week.

Before the pork market was established he believed that there were more pigs fed in the district. The dead market is not an improvement on the old system, as there is no competition. There is plenty of competition when selling the live animal, but only a limited number will be purchased alive. He had, however, never known any to be sent away from the factory. There is not one now where there were formerly eight or ten buying live pigs.

The factory price is lower than the market; if they gave the same price they would get more of the pigs.

He had fed Large and Middle York and Berkshire pigs. He now confined himself to the Ulster; he found it the most suitable, and was satisfied with it. He fed entirely on raw food except potatoes. He did not, however, rely on them; his mainly relied on the small tubers. He added cooked potatoes to the same quantity of meal. Pigs fed in this way turned out sooner and weighed better than those fed on a cooked food alone. He did not believe that pigs could be profitably fed on good table potatoes. Farmers required to be educated as regards the feeding of pigs. If it could be shown to them that raw food would give an equal return they would be induced to keep more. Local experiments should be conducted to demonstrate this as well as lectures; the latter, however, are not always attended.

If the shipping trade in succinea did not exist, far fewer pigs would be bred. He sold far more young pigs than he fattened, and it was a great advantage to have this market. Let the price be low or high it was most desirable that the farmer should have some guarantee as to the price he would obtain.

Mr. EDWARD W. LOCKHART, Kilmonghan House, Jurestapass, Newry.

Stated he was a farmer and breeder. The shrinkage in 1913 he would attribute to the price obtained for pork and of suckers or bonhams. When the price goes down breeders dispose of the sows and there is consequently a smaller number of pigs in the following year.

The price of pork and feeding stuffs influenced the price of suckers. When pork drops the bonhams are not bought and go down in price. Bonhams are now paying well. At 12 to 15 weeks old would be a good price. When the farmer is accustomed to getting a higher price, however, he is discouraged and gives up the industry. Of course, the man who keeps pigs continuously has the benefit. He had himself obtained £22 for a litter of 12 pigs and £28 for another of 11. They were good animals, and paid the

buyer also, though at this price he would prefer to breed and not fatten. He usually sold the bonhams, but it would sometimes pay him to fatten.

There may be fewer pigs in his neighbourhood, but this would not be due to any difficulty in the pig trade itself, but to other causes such as labour and economic conditions. The younger generation object to attend on pigs and they are not inclined for work of this sort. There was no difficulty when a man could be employed specially for the work. He disagreed with the view he had heard expressed that the conditions under which pigs were kept was the objection. Where animals were so kept it was entirely the fault of the farmer. In his own district the pigs were fairly well housed, sometimes better than the people themselves. The Rural District Council cottages have no pig sties attached, and this is a mistake. There is no labourer in the rural districts but should have a pig. So far as he knew the local council had never been asked to see to this matter.

Potatoes are the foundation of pig feeding, and this crop had a considerable influence on the number. To young pigs he gave potatoes, Indian meal, pollard, and some whole milk. The meal and potatoes are boiled. If it could be shown that good results are obtainable from raw food it would be a great convenience, but it would be necessary to have this pretty fully demonstrated before people would take it up.

The type of pig in the district is the White Ulster, and it is quite suitable. It thrives better and reaches a given weight quicker than the Large York, and it can be grown to 1½ cwt. at six months, the age at which it is usually finished, but to do this requires constant attention. His stock consisted entirely of the pure bred Ulster, and he sold a number for breeding. He had tried the York and Berkshire, but they were not so good, and he now had the Ulsters only. The Ulster gives more weight where it is wanted. If he kept pure bred Yorks he would have to fatten them and sell to the curers, as the suckers would not be bought. A good pig to which he had made reference would be of the type between an Ulster and a York. He knew of a pure bred York sow that took eleven first prizes as an Ulster, and was registered in the Royal Ulster Agricultural Society's Herd Book as an Ulster.

Pigs are kept by all classes of people, but principally by the small holders, for the reason that they have not to employ labour. To have this work properly done the man must supervise it himself or have it done by a member of his family.

In his district the cottager and small farmer who formerly kept pigs are now turning to poultry. The pig is still kept but is looked after by the man, and when sold the price goes to him. Poultry are looked after by his wife and family, who get the return.

Mr. T. J. BYRNE, J.P., Roenaleagh, Dundalk.

Mr. Byrne, a member of Council of Agriculture, stated that he was a tillage farmer (about 450 acres) and turned over about 180 to 200 pigs per annum, most of them bred by himself and generally sold finished.

He had judged at several local shows, and as a farmer he entirely favoured the Large York, and it was with great reluctance that he took up the Ulster, but his experience now is that the latter pays best. They are more prolific and better sows. From the farmer's point of view the Ulster is better than the York. He had himself both at present. He had also tried the Blacks; they were thrifty, but he could not sell them. They did not reach 1½ cwt. as soon as the Whites.

He was conversant with the operations of the County Committee of Agriculture. He would not agree that even if the Ulsters were giving satisfactory premiums should be confined to that breed. It is obvious that in some districts where pigs are sold alive the York is preferred. These pigs were, however, outcrossed on the County Committee in Louth.

He was doubtful whether the best value was being obtained from the funds available for live stock. £40 is given for premiums to boars. He thought that

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Mr. T. J. Byrne, J.P.—continued.

Mr. T. J. Byrne, J.P.—continued.

sons would be better spent in giving prizes to sows with litters at foot. The instructor could see the animal, say, four times in the year and on his report 10/- could be awarded to the man who had the best 80 sows and litters and kept them under proper conditions. This would cost £60 and the cost of administration would be practically nothing, whilst the scheme would create more local interest, and he believed the results would be as good as from the present premium scheme for boars. Large farmers are not breeding and there is a difficulty in getting sufficient applications for boars.

The County Committee do not administer the money as he would like. They are now subsidising boars that would be kept in any case. He had no objection to the premium system, but was anxious to make the most of the money. It would then be to the interest of the breeder to send his sow to the best boar and the right boar would be kept, whether a premium was granted or not.

The man with the sow has all the trouble and the scheme he suggested would provide a better spirit of emulation.

In County Louth also he thought too much money was being given for horses and cattle and too little for pigs, but there is the difficulty in getting premiums taken up, and he understood that more money would be given if applicants could be got. Until the recent regulations regarding members of the Committee obtaining benefits under the schemes were put into operation several members of the Committee and County Council kept boars at the strong request of the County Committee in order that the premiums might be taken up, and that was practically their only reason for doing so. When these men could have them no longer it was found very hard to have the premiums taken up. His view in this matter, however, was to help the breeder.

As a bonham, the York looks best and weighs most at nine weeks old, but the Ulster is brought quicker and it improves more in the fattening. As a bonham they want the fatty ears. In his opinion the Ulster suited this part of the country, and he considered that premium boars of whatever type the applicants wanted should be given. He had as yet no experience of the cross from the Ulster and the York.

He was surprised to hear some of the owners say to-day that they liked the Ulster, because he was under the impression that they were opposed to this breed. They make no difference, however, in the price. He considered it strange that they had no regard as to how a pig was bred or fed. The Ulster comes to 1½ cent. sooner, but not very much so.

Potatoes are the staple production in the county and constituted the main feeding for pigs. In winter he fed entirely on boiled food and in summer on Indian meal steeped in hot water. His experience is that with raw food it takes longer to fatten the animal, but his only experiments were with turnips and potatoes in summer. His practice is to boil the potatoes, mix in the meal, and then put in bruised corn; this is semi-cooked. If it were possible to get good results from raw food it would induce many people who now have difficulty in cooking to go in for pigs.

He calculated as closely as he could the quantity of food required to produce a cent. of pork. He was able to obtain Indian corn direct from Liverpool at 40 3/4s. per ton, but some of it is very bad stuff.

He thought more pigs should be kept. It is one of the industries that can be developed almost indefinitely. The farmers with large holdings do not at present feed many. The industry is confined chiefly to small holders, of which the county principally consists.

The standard of living and ideas of the farmers' daughters are too high and they will not do this work. This has a retarding effect, and the result is that more direct labour has to be depended upon. There is a certain objection on the part of young men to do the Sunday feeding of pigs on large farms, but otherwise there is no difficulty. On the smaller holdings except for girls objecting to do the work there is no difficulty either, as the work is not dependent on outside labour.

The poultry industry has developed enormously. This is almost entirely in the hands of the farmers' daughters, but he did not think it interfered with pig feeding. He considered they should have both.

The Rural District Councils have supplied all labourers' cottages with very good pig sties. The previous witness, who stated that as much provision was made, was probably referring to the Urban districts.

## SIXTEENTH PUBLIC SITTING.

FRIDAY, 18TH DECEMBER, 1914.

AT 10.30 O'CLOCK, A.M.,

At the offices of the Department of Agriculture, 4 Upper Merrion Street, Dublin.

## PRESENT:

Mr. JAMES S. GORDON, B.Sc. (Chairman).  
Mr. R. M. BORN.  
Mr. STEPHEN O'MARA.

Mr. PATRICK CLOKE.  
Mr. J. WILKINSON, A.P.  
Mr. O. W. H. BOUTWELL, B.A.

Mr. SAMUEL KOUGH, Baldoyle, Co. Dublin.

Mr. Samuel Kough—continued.

Stated that his experience referred chiefly to County Wicklow, where he had been engaged in the bacon curing trade.

He attributed the shrinkage in pig numbers to the wholesale slaughter of stores and sows in young during the outbreaks of swine fever, the high prices of feeding stuffs, the cost of labour, and the attention pig feeding entails. He referred especially to 1912. He was under the impression that swine fever was prevalent in that summer in one district about Dublin. If other districts were in the same position it would have the effect of causing a shrinkage. He

supposed there would be thirty to fifty pigs slaughtered in many cases, but he acknowledged that the outbreaks of swine fever occurred in isolated cases only throughout the country and that they could not account for the decrease of three hundred thousand pigs in 1912; but it would be one of the factors operating in this direction.

There were complaints generally regarding the cost of feeding stuffs, the prices of which have been increasing in recent years, some of them to a considerable extent, but he did not think the prices fluctuated very much. The extent of the potato crop or the price

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Mr. Samuel Keogh—continued.

of purchased feeding material had but little effect on the number of pigs fed. The important consideration is the price of pork. So long as this is satisfactory the pigs will be kept. The cost of bone-meal is also a factor which would largely influence the labourers, as some are not able to go beyond a certain figure for a store. He had known bone-meal to be sold when two weeks old at prices varying from 10/- to 15/-. The cost of bone-meal or feeding stuffs did not, however, vary so frequently as pork.

The Middle and Large York crossed with the common sows produce the pigs most suitable for Waterford owners. Seven or eight years ago he obtained some of the Middle York breed from the establishment kept by Messrs. Richardson or Denny in Waterford.

Farm hands do not like pig feeding. Pigs are, however, mostly kept by the small holder or labourer, and the work is done by himself or his family. Pigs are not so generally kept on the large holdings, and, of course, the labour difficulty affects them to a much greater extent. The small farmers up to twenty acres should be induced to keep a couple of sows, and larger farmers up to five; he had no suggestion to offer as to how this was to be done except by pointing out to them that it would be profitable. Landlords should be distributed. They should not be too much influenced by the low prices obtained for young pigs at times, if they lose on one batch they will make it up on another. If the sows were kept continuously they would give a good average return; when not kept regularly there is but a slight prospect of obtaining the high prices when ruling.

Pigs are not maintained in anything like a proper condition or receive the same attention as other farm stock. They need as much attention as any other animal on the farm, and will repay the trouble. If these matters were attended to they would thrive much better. The cooking of food is troublesome and laborious, and if it be given raw it would be a great advantage.

He was of opinion that in the Baidrois district pig feeding is not carried on extensively. The restrictions with regard to keeping pigs close to the dwelling-house in urban areas precluded many cottagers from taking up the industry. The work would be done by the labourer's wife and it would not be taken into consideration. The numbers kept in towns would not perhaps be more than twenty per cent. of that maintained formerly. This was his experience of the town of New Ross, where he was engaged. The sanitary restrictions there were, he thought, enforced by the authorities more than was necessary in the interests of public health, and they had prevented many householders from keeping pigs in the town. The public kept would be much more objectionable, but were not interfered with. He acknowledged that these regulations did not account for the shrinkage in 1913. He knew towns where men fed 25 to 30 pigs continuously on raw food. This, he thought, was no longer done. The increase in pig manure referred to as regards Waterford might be accounted for by the proximity of the curing factories. In his experience, however, the general effect of the sanitary regulations is to prevent pig feeding in the towns. He knew that the conditions under which they were formerly kept in the towns was most unsatisfactory, and he recognised that it was quite right to stop the nuisance created. He admitted that the nuisance had often to be taken out through the dwelling-house, that straw had to be purchased and in consequence was frequently done without, and that it was extremely difficult to keep the pigs properly. Steps should be taken to provide enclosures at the back of the dwelling-house and proper accommodation for pigs. He thought, however, that the tendency should have been to enforce the regulations more in the direction of compelling improvement in the manner in which the pigs were kept instead of insisting upon having them a certain distance from the house. Farm labourers also keep pigs, including those working in the towns and living just outside the urban areas.

To increase the number fed in the urban areas the present restrictions required to be somewhat relaxed. A small proportion only of the pigs are kept in such

Mr. Samuel Keogh—continued.

areas, the great majority being now maintained in the rural districts; but it would induce a number of people to fatten in the urban areas if the present sanitary regulations could be modified without interfering with the safety of the public health. He had not gone very fully into the details of the subject.

He favoured the encouragement of local bacon factories to manufacture bacon for home consumption. At present nearly all the factories are proprietary concerns and seem to prefer not to sell their bacon for home consumption but to send the greater part of it to outside markets. The bacon consumed in this country is principally American, and he considered that the establishment of local factories would result in a profit. There are pigs which could be cured for home consumption in these factories which would not be suitable for the trade of the existing concerns. The more extensive equipment such as a refrigerator would not be needed, and a considerable portion of the cost would be saved in this way. The pigs could be simply cured in salt. He had done this himself. There is a demand for a big lot of the American fat bacon, which is suitable for boiling with cabbage. That demand could be met by curing here the heavier and coarser class of pigs. He would have the suggested factories deal with pigs that are not taken by the concern at present. Even in summer the work could be done without incurring the cost of a refrigerator. He did not suggest any subsidy; it was a question of an individual having the courage to embark on the project.

There had been a number of small factories in New Ross and Waterford about thirty years ago, but there is only two limited companies in the latter now. They prospered for some time, but the larger establishments did away with them. Originally the latter were owned by private individuals, and afterwards became limited companies. With the additional capital as their command they were able to pay more for pigs. He acknowledged that if any smaller small factories were started and could not pay equivalent for pigs than sellers were receiving they might probably lapse. The first essential should be to create a taste for Irish bacon. When America was formerly 4d. and 5d. a lb. the Irish was about 6d. The difference is not now so great, the conditions are changed, and there is an opening for this trade.

Mr. B. F. EUSTACE, J.P., Hillside Farm,  
Glennavin.

Mr. Eustace, representing County Dublin Farmers' Association, stated he was a farmer and had been breeding and feeding pigs for about twenty years, and generally kept between seventy and a hundred.

The causes contributing to the shrinkage of pig numbers in Ireland during the past three years were, he believed, a decrease in the number of breeding sows; an increase in the price of feeding stuffs, and the higher returns received for store cattle. Other factors were the swine fever restrictions over the County Dublin; labour trouble, including the difficulty of securing attendance on Sunday; Foot and Mouth disease restrictions, which, however, might be regarded as more or less temporary; want of housing accommodation in some districts; and the new regulations re pigs brought into force by the Dublin Corporation.

There has been a decrease in the number of sows kept in his neighbourhood, and this commenced in 1912, leaving a shortage in the following year. The cause would be the cost of feeding stuffs and the price for store cattle, which were kept instead of pigs. A plentiful supply of potatoes increased the number kept, chiefly by small holders and labourers, and vice versa. Potatoes and Indian meal being the main supplementary foods, any increase in price lessened the number of pigs fattened. Prices were high in 1912. A greater supply of home grown food would place the farmer in a better position. The farmer instead of purchasing imported stuffs should grow the necessary feeding, especially when prices are high. He himself



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*Mr. R. F. Eustace, J.P.—continued.**Mr. R. F. Eustace, J.P.—continued.*

grew a quantity of barley for cattle and pig feeding, and he used it for that purpose if he could not get it a barrel.

He fed the barley cooked, as he considered that it went further this way; a sack of boiled barley makes a good bulk, and pigs like a lumpy food. He boiled the grain whole, and utilised the waste stream from a steam engine for cooking the food. He both bred and fed pigs, and found that it paid to grow food for them. Year in and year out the business is profitable. Were there more tillage there would be more pigs. He fattened most of his pigs; and sold some of the bonhams when he got overstocked. He had not tried any experiments with raw food, though he had seen literature on the subject. If the Department would carry out such experiments he would be glad to observe the results. He agreed that it would be desirable to carry out local demonstrations as these would bring the matter home to the farmer much better. It is a far more convincing method than literature. He would not suggest that the experiments be conducted with a liquidated pigs. The object should be to carry out demonstrations with the class of men who feed the majority of the pigs, i.e., the small holder.

In Dublin for the past few months there had been a big drop in the price of bonhams, yet pork is nearly as dear as at any time. He did not think that the ordinary keeper of sows in Dublin thinks about the price of pork, and it does not affect the question so largely as might be supposed. He merely looks at what price he will get for his pig in Dublin market. If he had a plentiful supply of potatoes he will keep at the business. He was all this time referring to the small holder. In the urban district the bonhams are bred and sold; they are rarely fattened.

Small holders and labourers raise most of the pigs. They are not usually kept by the larger farmer, and it is the latter who runs in and out of the business. The former will probably keep them in any case. It is very difficult to get the large farmer to keep sows. He has a strong labour difficulty to contend with both as regards male and female servants.

In the city there are many dairymen and cow-owners who formerly kept pigs. The Corporation bye-laws do not any longer permit of sows being kept in the city, and the sanitary regulations prevent a number of dairymen from engaging in the industry.

In North County Dublin the labourers' cottages are not provided with any pigsties. It was probably a matter of cost. In South Dublin they are. In the northern portion some of the labourers have to turn the privy into a house for pigs or put up some other accommodation. He knew of one row of eight houses on the outskirts of the city, in the backyards of six of which pigs are kept; they are kept clean; there is a way out at the back, and the sanitary authorities do not mind them. In this part of the county owners of swine on small holdings should be urged to put up better accommodation. He was not aware that there was any hard and fast rule as to the distance the pigsty had to be from the dwellinghouse.

He would not say that the small holders and labourers are going in more for poultry.

Labourers do not like minding pigs on Sunday. Cattle do not require the same attention; in any case they are looked upon as more valuable and will be attended to sooner than pigs. The feeding of pigs is done in an offhand way only; and labourers certainly object to pig feeding on Sunday.

Owing to the high prices for bonhams there is an extensive demand for sows at present. He did not think this would result in any glut; there would be a demand for all. When set sold the bonhams are fattened by the breeder. From Dublin there is no shipping trade in bonhams or in pigs for the London pork market. Most of those who keep sows will hold them on even when the returns are low in the hope that prices will improve. They say that the cost of maintaining a sow is not heavy. The prospects in 1912 were not encouraging, but he was not aware that anyone in his district gave up breeding on that account. He had never known ordinary bonhams to be lower than 21s.

The quality and type of pigs in Dublin are quite satisfactory. In the northern part of the county most of the people go in for the Large York. Those who keep boars try to procure the best animal they can. He himself got them from the Department and also imported them from the other side. He gets a service fee of 5/- freely. In his opinion this is the usual charge in the county. He can keep a heavy and light boar going. He would have to receive a substantial premium before he could accept 1/- service fee. The 25 would not be of much use. The premium should be higher in Dublin. He would, however, agree to leaving the premium as it is and raising the fee. It would be easier for the County Committee to raise the fee than to give a higher premium. He was aware that they were limited to a certain sum for live stock, but in view of the number of pigs in the county he considered that the amount set aside for swine should be much larger. It might be taken off horses and cattle. He would recommend that more premiums be given for boars and that the fee be raised. In his own case if he found that the premium boars were taking the sows from his sires owing to the low fee he would endeavour to obtain a premium animal, but he would take care to get an ordinary boar of a much better class and charge 5/- for the latter. He had not the smallest doubt that the sows would be given to the better sire. Anyone in Dublin who breeds pigs wants to see the boar and will send sows to the best perspective of the fee. People about Dublin do not like to keep boars, and he had some coming to his place from upwards of ten miles. He did not consider that these men would keep more sows even though they had a premium boar next door. They might not, of course, send the sows such a long distance as they now do, as they are breeding ordinary stock only. There is now a difficulty in getting premiums taken up as it would not pay to keep these animals.

He had not himself come across Ulster boars in Dublin, but he was aware that they were kept by a few people in South Dublin, who won't have anything else. He thought the old Wicklow sows approximated somewhat to the Ulster type; they are good nurses and gave a very good cross when mated with the Large York. Any inferior stock, being slow to grow and fatless, seriously affected the output, and a better class of animal would increase the supply by becoming finished more rapidly.

He never had swine fever on his place except on two occasions when he bought pigs in the Dublin market. In 1902 when he had 80 pigs and 6 sows on his place restrictions were imposed upon him in consequence of swine fever being suspected. The veterinary authority came and took a couple of pigs away. The sows fattened and he had no more for the extra pigs, but the Department's inspectors refused to do anything until pressure was brought to bear on the Department, when they took away the pigs. He gave other instances. These difficulties, however, did not prevent him from continuing to keep pigs. He quite agreed as to the necessity for the regulations in this respect. Once pigs go into the Dublin market or are bought there they must be quarantined for twenty-eight days subsequently. There is good competition in the selling of pigs in Dublin. There are shippers, sellers, and dealers. He did not recollect ever having seen pigs weighed. They are all sold by hand, and he did not think it would be easy to change the present custom. Where it is desired to do so it would not be very difficult to weigh a pig, but there would be no demand for a special scale.

Irrespective of the price of bacon, a big market will always entail a reduction in the price. The local supply and demand had a good deal to do with the price. One pound is the lowest for a bonham, and it goes up to 35/-. He had never known of 23 being obtained. He had sold a number of 12 weeks old animals on the previous day for 27/6. People like to get pigs they know, and accordingly preferred to buy from him instead of from dealers who collect small signs around the country and bring them to the market to sell.

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Mr. A. C. GRIMES, Dardistown, Cloughan, Co. Dublin.

Mr. A. C. Grimes—continued.

Mr. Grimes, representing County Dublin Farmers' Association, stated he was a farmer, and ten years member of the Association. He was a member of the County Committee of Agriculture for the past six or eight months, but was not yet quite conversant with the previous work of the Committee. Concurred generally in the evidence given by Mr. Eustace.

There was in 1911 a tendency to decrease the number of sows, and there would be consequently a shrinkage of pigs in the following year. He had seen the figures sufficiently early to anticipate what was likely to happen, and had accordingly increased his own stock of sows to be in a position to meet the future demand. His place, however, was unfortunately placed under restrictions owing to an outbreak of swine fever, and later the Foot and Mouth disease restrictions came into operation. While the Department had been giving licences for the movement of store cattle they were slow to do so as regard store pigs. He was completely locked up for about six months although he could have placed his pigs with feeders who would have been willing to keep them for a definite period. He considered that the interests of owners of swine did not receive sufficient consideration at the time.

The origin of the restrictions on his place was that at the time of the outbreak of Foot and Mouth disease in 1912 he lost a boar; he did not understand what happened in, and there were no other pigs sick, but he reported the fact immediately. Restrictions were at once imposed on the premises, and nothing further occurred for about a month, when some of the other pigs became ill; this was also reported; the pigs were taken by the Department, and some time after he got an official letter intimating that swine fever existed in his herd. The remainder of the pigs were not, however, slaughtered. The inspectors had been calling three times a week before they apparently discovered swine fever. What he could not understand was why all the pigs did not take it. The healthier animals were not slaughtered, but left with him to die or not. He was under the impression that the Department altered their policy at that time, as the custom previously had been to slaughter all the pigs on the premises. He judged from their action that the inspectors were to take only the animals visibly affected. Where there is a small number of pigs he understood they were slaughtered wholesale, but this is not done in the case of a large number. He had sixty at the time, and six only were slaughtered. He killed a few of the pigs himself in order to lessen the period of restriction; the restrictions, however, lasted for six months. He was compensated for the animals slaughtered. He was not at home when one lot was ordered to be destroyed, and he was not satisfied with the amount of the compensation received in that case. He was not notified whether the last lot taken was affected with swine fever or not, but it was declared to exist in the first lot. The Department did not either kill the pigs in contact with the affected animals or offer to buy them. He was aware that there was a large number of pigs in contact with the affected animals, but no steps were taken to deal with them.

The swine fever restrictions were imposed in July, 1912, and left on until the following February, 1913, at which time he wrote to the Veterinary Branch of the Department asking for a definite statement of their policy re swine fever restrictions. Had he been notified that the pigs would have had to remain so long with him he would have known what to do. He would not have complained had his place been free in October. In that month the Foot and Mouth disease restrictions were withdrawn; previously he had been under two sets of restrictions. The herd was constantly inspected for three or four months without any apparent signs of disease, but yet he did not get free from the restrictions until February. He believed the Veterinary Branch had full particulars of the case.

All his stock were pure bred, but not registered. Some of the Large York pigs have a tendency to put on too much fat, and he would like to have a boner type of pig. The smaller holders wanted pigs with large forward ears, and this was the type of the

Wicklow pig. When he first got the Large Yorks they would not be bought; but as a rapid fattening pig was turned out in a much shorter time than the Wicklow, and numbers of people had adopted this system. The York can be sold for pork at almost any time, but this does not apply to the Wicklow; the latter does not show the fat until mature. When the Wicklow pig is fat the price for it and the York would be about the same, but it would not have put on so much meat for the food consumed. The York would have been finished in about seven and the Wicklow in ten months, so that the York is a marketable commodity earlier.

In Dublin market there is a large demand for a pork pig of 8 to 10 stones. It is a great asset to have a pig that can always be marketed, and this can be done with the York.

The experience of the County Committee is that they cannot get applications for premium boars. If a sow affected with swine fever sows in the year also is restricted. Only a person who had no other pigs would be the man to keep a boar as the restrictions would fall lighter upon him. Of course, these restrictions would apply to any boar; but the fee of the premium animal is more attractive and more secure would come to him, so that there would be greater danger of infection. The sow might come from another side of the county. Anyone who had premium boars gave them up on account of the risk they were running in this connection. Swine fever has practically always been existent in Dublin. He believed there were some premises that would never be free and would always constitute a source of infection.

The value of the premium is too low for County Dublin, and he would suggest that it be increased and that the fee be raised to 2/-. In his district the usual fee for a non-premium animal is 5/-. Economies could be effected on other schemes and additional provision made for boar premiums, as the pig industry in Dublin is deserving of a larger amount of assistance, and the principle should be to help the small holders. Over 4,000 is given for sows; about £225 for cattle, and 450 only for swine.

He sold pigs in Dublin market. A licence had to be obtained before they could enter or leave it. If disease occurs in connection with any pig that had been on the same stand that day all the herds they came from were restricted. He did not object to this; but having found the herds free from disease restrictions were not very promptly removed. In one case he had been restricted for 30 and in another for 35 days. In his opinion if the herd was free after 28 days the restrictions should be at once taken off. During these two periods there was no sickness about his herd.

There should be some kind of co-operation between the Veterinary Branch and the breeder. In consequence of the restrictions to which he was liable he would not now sell any pigs in Dublin market. Sows and fat pigs are mixed up. He believed that the latter, which are killed at once, should be kept apart from the others, and there would thus be less danger of contagion. If an outbreak now occurs every animal on the stand is restricted; while if the fat and sows pigs were divided, only the pigs from a particular pen or section should be restricted. There is no encouragement given at present to report cases of disease. He would raise no objection to the restrictions when the disease existed, but there were often restrictions when there was no danger. If he lost a couple of boars on a sow fattening he was expected to report it, but the result would be that he would be locked up for two months; and if these losses had to be reported frequently his business would be dislocated.

The County Dublin produces a large quantity of potatoes, particularly for the early markets. The digging begins in June and July. The small holders buy pigs then in order to utilize the inferior and discarded tubers. These pigs are turned out in October. There is then also a supply of cheap potatoes and a number of pigs are fattened. Pollard and Indian meal are the main additional foods. The supplies of grates, on which many people depend, are getting

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Mr. A. G. Grouse—continued.

swine, and this accounts somewhat for the reduction in the price of hockams. The smaller feeders buy limited quantities only; when they cannot get Indian meal or pollard at a reasonable price they will not buy these and the result is seen in the decrease of the price of the hockams. Very few people can do more than guess what they will get for the pigs when finished, and they do not take this into consideration. He did not think, therefore, that the price of pork influenced the number kept. The small holder takes his chance.

In Rahmobery Union all the cottages were supplied with pigsties, and these are generally used. Under the District Council's new scheme no such provision is made, though there is a garden and a fair amount of food available. There are few labourers with cottages other than Rural District Council's cottages, and the labourers' means are so limited that they are not able to put up suitable buildings. He could not say why pigsties were provided in one Union and not in another, except that the funds did not permit. The Council have put no restriction on labourers as regards buildings; they erect so long as their neighbours are not interfered with. The labourer cannot leave an R.D.C. cottage.

The Board of Works loans are not applicable to small holders. If some provision could be made to grant loans it would be a great advantage. In the case of the R.D.C. cottages the Council should be allowed to guarantee repayment of the loan for erection of pigsties. If it were given at a low rate of interest he was sure the Council would be willing to do so. They could increase the rent to cover any extra cost, and he was confident that the cottagers would be willing to pay such slight increased rent if provided with pigsties. Even yet it would be advisable to make provision to have pigsties erected at all the cottages. The local authorities should certainly have power to borrow money and change it in the manner he suggested. If small holders and labourers were given any facilities and instruction he believed they would be ready to put up better accommodation.

Mr. MICHAEL BOWE, 34 Lower Gardiner Street, Dublin.

Mr. Bowe, representing Irish Pig Dealers' Association, stated that he is engaged in buying and shipping pigs. He was shipping on his own account as distinct from buying for the curers.

The shrinkage in 1913 he considered was attributable mainly to the Foot and Mouth disease restrictions. Pigs bought for export from farmers and feeders had to be taken at from 15/- to 20/- less than their ordinary market value. Some pigs were sold at relatively less than their cost price. He acknowledged that these restrictions did not apply to the whole of Ireland; that there were pigs shipped from the north, and that there would be a decrease in the south and west and not in the north. He now learned that the disease was general and that it occurred before the outbreak of Foot and Mouth disease. In consequence he could not attribute the decrease mainly to those restrictions, nor could he offer any opinion as to the cause of the shrinkage over the country. One of the factors as regards Ulster might be the fact that pigs are slaughtered by local butchers and that they are not properly treated and cannot be cured as well as when killed in the factories. The fact that all the pigs had to be shipped to one port meant that there was a glut in that market, with the result that there was a reduction in the price and this affected all Ireland. There is not much shipping done in the north. He was under the impression that the number of pigs shipped would be quarter million as compared with 1½ millions killed in this country.

Pork was cheap in 1911 and feeding dear, so that some were sold off and there was a smaller number of pigs available later. He did not think that the price of pigs affected the feeder. If it is low he buys the bonham cheaper, and if the price of pork is high bonhams are proportionately dearer. Of course, he

Mr. Michael Bowe—continued.

admitted that the labourer would be influenced by the high price of bonhams. Many of them would not be able to pay £2. As a general rule, however, a few shillings in the price of a pig will not interfere with the industry.

He had been under the impression that pig feeding is not carried on so extensively as in former years owing to the restrictions imposed by the Department in various towns and cities in Ireland, but he now learned that the shrinkage applied to one year only. If the number goes above normal there would be a slight reduction in price, but it would depend mainly on the English market. He thought the supply could go up somewhat higher at present without causing any glut. He did not consider that an increased supply from this country could affect the price much. The fluctuations in recent years are by no means comparable with the serious fluctuations that formerly took place. He considered that the Danish and other supplies in London were responsible for the reduction in the price in 1913. The price in this country is entirely dependent on the London market. He had been through most of the factories at Waterford and was aware that they had capacity and equipment capable of dealing with practically double the number of pigs they were getting now. American hams formerly came into Ireland at 4d. per lb., and this had an influence on the buying of pigs. The competition would now be mainly from Denmark and the Continent. He believed that it should be possible for Ireland to obtain a better hold on the trade than heretofore, and he did not think that prices would ever go so low as they had been.

An increased number of pigs is obtainable in the west, but several of the southern fairs, where formerly there would be regularly a thousand pigs every month, have been wiped out altogether by the live weight scales, and over the south generally the same number of pigs cannot be got in the fairs. He would not agree that selling on the scales was the best outlet for the farmer. If he sells at 11 or 12 stone weight he is disposing of the pig just when it is about to pay. When it passes 12 stone it thrives much better at the same cost of feeding. The effect of the live scales is not to help the supply, and the introduction of this system has been to decrease the number of pigs. Farmers were advised to fatten to 10 or 12 stone only, with the result that the fairs went down. Buyers by hand could not attend, and competition was absent. He believed that the old way of disposing of pigs by open competition was an inducement to farmers to feed. In the west there is no buying on the scales, the buying of pigs is on the increase, so that he attributed the reduction in number in the sales of the south to the want of competition.

If the live weight purchasers bought once a month instead of weekly, pigs would be more matured and would fetch higher prices, and better competition would be provided. In the west the practice of feeding pigs to heavy weights is becoming less and the supply for shipping is decreasing. If the number of heavy animals be reduced, of course, those for shipping are also less. The pigs for shipping are usually those too heavy for the curer and do not command the best price, but there are times of the year when desirable pigs can also be shipped, that is when English prices are better than Irish. Where the live scales have been established there is no competition between the curers and shippers. In his opinion the scales should be abolished and the fairs re-established. Where there is good competition he believed that the scales would not get many pigs. He admitted that this was a big question, but he considered that the farmers would be more satisfied. He agreed that if the farmers want to keep on the fairs they will sell the pigs there, but he thought many of them would like to see the fairs re-established.

Farmers formerly had an idea that pigs are bought at an enormous profit. He was a large supplier and knew that this was not correct. The farmer instead of being better off when the live scales came along, finds himself in a worse position. There are practically no fairs where there are live weight scales and many of the dealers do not find it profitable to attend. The scales were first started in Waterford,

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Mr. Michael Bost—continued.

Carlow, Kilkenny, Tipperary, and Limerick; in those and in King's and Queen's Counties the fairs have disappeared almost, the farmers are at the mercy of the live weight buyer and do not believe that they have sufficient competition. He would say that fewer pigs are kept in those counties. The live weight scales were started about seventeen years ago, and if the figures from that time were available he believed they would show a decrease compared with previous years.

The CHAIRMAN read the statistics for those counties since 1891, and pointed out that the figures did not bear out Mr. Bost's contention; the exact contrary was the case.

Mr. Bost admitted that from attending the fairs he did not gain an all round impression of the number of pigs in the country; that as he did not see those brought on the scales and sent in direct to the curing establishments he would have been led to believe that there were fewer pigs being bred. The dealer is able to handle a mixed lot better than the farmer, as he can grade them for the different markets with a view to getting the best return from each, and in this way the dealer is useful to the farmer. Many of the pigs for which the dealer has an outlet could be taken by the farmer only at a lower price.

He was not a breeder and would not offer an opinion as to whether it was advisable to induce farmers to feed to medium instead of heavy weights, but in the west some of the people prefer to feed the pigs over a good period and get for them 25 10s. to 25 15s. each.

The average weekly cost of feeding a pig is about 5/6; 7 lb., say, would be put on weekly during the first fortnight, and after that about 10 to 12 lb. dead weight. This left a good return to the feeder. The quotations in the price of pork had, however, to be taken into account.

A plentiful supply of potatoes means more pigs, but before the potatoes can be produced it should be made clear to the farmer that pig feeding is a greater source of profit than store cattle. Pigs in the west are fed mainly on potatoes, and this accounted for their high quality.

He could not offer an opinion as to the feeding of pigs in Dublin, but in the city the use of Indian meal is not understood. Offal from hotels and other places is usually given to pigs, and these feeders know nothing about Indian meal, the result is that the Dublin pigs are not very good. The practice of the average Dublin feeder appears to be quite different from the remainder of the country.

He was not aware of the results that had been obtained from the use of raw food, and this information was very useful. He fed a number of pigs himself, but whilst he formerly cooked the food, he now steams the meal only.

In his opinion there had been an improvement in the quality and type of pigs within the past ten or twelve years, and he did not think any further improvement was required. He was not dealing with the north. The owner did not like the Black, and from the shipping point of view he would not care for it, as it was not wanted in England. He had been selling pigs in Birmingham for a number of years and had to take a smaller price for the Black. The black streak continues through the pork and the meat won't be bought. His experience generally is that the Black does not return his best price on the other side, and he would not like to see it introduced for any purpose. There is no cut on the black and white pig; it may kill all white. He had no experience of the Ulster.

He shipped an average of one hundred pigs weekly during parts of the year. Most of these were obtained from the west. There are other fairs throughout the south and south-east of Ireland, but they would not be worth attending.

He would suggest that distribution stations be established by the Department to give small farmers and labourers a chance of disposing of bonhams on favourable terms. It would be a great inducement to the small holders who have no means of purchasing pigs at

Mr. Michael Bost—continued.

present. The bonhams could be paid for when the pig was disposed of. He admitted that the Department would not have much security for the payment. He had not thought out the details of the matter.

The transit of pigs was a serious drawback, and he had suffered much loss in this connection. He had known of pigs being thirty and thirty-six hours in the wagon before arriving at their destination, and no animal deteriorates more than the pig from such causes. Another difficulty arising in the west is that if sufficed wagons to make up a special train are not ordered it takes about double the time for the animals to reach their destination. There are delays at the different junctions and no effort appears to be made to catch connections. He referred to one case where it took forty-two hours to send some wagons of pigs from Loughrea fair to Waterford, a distance of about 170 miles. He had made a claim on the railway company; they gave him no satisfaction, nor will they give any satisfaction when pigs get killed in transit.

The CHAIRMAN pointed out that the question of transit was not within the scope of the Committee, and that such matters should be submitted to the Transit Branch of the Department.

Mr. Bost said he would do this. Buyers must purchase at a lower rate to make up for the depreciation consequent upon these delays and risks, and the loss really falls upon the seller. The deterioration on pigs after thirty-six hours in a wagon would be about 15 per cent.

Mr. D. S. PRENTICE, M.R.C.V.S., Chief Veterinary Inspector, Department of Agriculture and Technical Instruction for Ireland.

Mr. Prentice stated that the powers exercised by the Department in connection with the suppression and control of diseases of live stock were conferred upon them by the Diseases of Animals Acts, 1894. Under that Act the Department had made an Order known as the Swine Fever (Ireland) Order of 1900.

Every person who has a pig suffering from or suspected of being affected with Swine Fever is, under a penalty of £20, bound to report the matter to the Police. The latter are required to communicate with the Veterinary Inspector of the local authority and with the Department at the same time. The Department's inspectors practically work that order themselves. If the pig is dead its bowels are examined to ascertain whether lesions of swine fever are present. Swine fever is sometimes very difficult to diagnose during life owing to the external symptoms, which might be attributed to other diseases. Consequently before the Department conclude that they are dealing with swine fever they require an examination of the bowels. If swine fever is discovered restrictions are imposed on the movement from the premises and if the pigs thereon have been in contact with other herds the latter are placed under restriction also. The usual practice is to slaughter out the diseased animals and those in contact with them. This, however, is not always done. It is usual for the Department to slaughter swine in these places, but they are not bound to slaughter any animal. If they do slaughter the animal, however, they must compensate the owner. If the swine are slaughtered as diseased and on post-mortem examination the disease is found, the owner is awarded compensation equal to half the market value of the animal or animals. If the pig is slaughtered not on account of being diseased but on account of being in contact with diseased animals, the owner is allowed the full market value. The animals on infected premises are not always slaughtered almost entirely, for the reason that the funds at the disposal of the Department for this purpose do not permit of this being done. The Department, however, take steps in such cases to prevent the disease spreading, and they therefore keep the infected herds under restrictions.

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Mr. D. S. Prentice, M.H.C.V.S.—continued.

Mr. D. S. Prentice, M.H.C.V.S.—continued.

He submitted a list showing the extent of swine fever in Ireland as indicated by the confirmed outbreaks dealt with by the Department. They were as follows:—

Year	Outbreaks	
1902	166	
1903	175	
1904	181	
1905	187	
1906	95	
1907	163	
1908	218	
1909	87	
1910	196	Mainly in and about Dublin; one case each in Connacht and Munster; 2 in Ulster.
1911	178	do., 4 each in Ulster and Munster, and 10 in Connacht.
1912	215	do., 10 in Ulster, 29 in Munster, and 6 in Connacht.
1913	120	do., 4 in Ulster and 38 in Munster.
1914	193	do., 3 in Ulster, 29 in Munster, and 15 in Connacht.

It would thus be seen that during the past ten years, while the number of cases fluctuated, the tendency is for them to decrease.

In reference to statements made by a previous witness, Mr. Grimes, regarding swine fever restrictions on his premises, Mr. Prentice stated that he was conversant with the facts of the case. The premises were put under restrictions on 2nd July, 1912, owing to an outbreak of swine fever. He disagreed with Mr. Grimes' statement that there was no case of disease subsequent to the first one. On 12th July two pigs became infected and had to be slaughtered. The delay in furnishing an intimation as regards the first animal reported was due to the difficulty which the Department experienced in diagnosing the disease. The case was suspicious, and the inspectors were not in a position to form a definite conclusion at the time. Mr. Grimes was correct in stating that six live pigs were not slaughtered, but those that became affected were. He asked on different occasions to have some of the pigs removed to the premises of other people, but the Department did not consider that it would be safe to allow this. He was, however, allowed at any time he wished either to slaughter the pigs himself or have them taken out under licence to any slaughter-house he might select about the district, and was several times notified to this effect. The outbreak occurred at the time of the Foot and Mouth restrictions. The Department's funds in this connection were required for other purposes, and owing to the cost that would be involved the Department did not see their way to slaughter out the herd. Where money could not be provided for the slaughter of the whole herd and where some of the pigs appeared to be diseased these were slaughtered so as to minimise the risk of infection spreading. This was the policy adopted in Mr. Grimes' case. Some of the animals might have died, but in the circumstances the Department could not help this. There were deaths in Mr. Grimes' herd in October and November, and from the police reports there was nothing to show that Mr. Grimes had killed the pigs merely because they did not thrive. The last date on which swine were slaughtered by the Department was on 5th October; these were, however, discovered to be free from disease and Mr. Grimes received full compensation. The last case that was undoubtedly swine fever occurred on 12th July. The restrictions were removed on 1st February following. He had to doubt the outbreak was one of swine fever; and having regard to the number of deaths amongst the swine and which the Department were not in a position to say might not have been due to swine fever, he did not think Mr. Grimes had been unfairly dealt with. At the same time he might say that it would have been better policy to have slaughtered all the swine on the place were it practicable to do so and pay compensation as well. It is possible in almost any infectious disease that innocent animals may escape the disease. The pigs cannot be disinfected so long as it is full of pigs, and it is not the practice to do so but to hold

up the pigs and inspect them from time to time. The restrictions had to be maintained on Mr. Grimes' farm until it was considered there was no danger of the disease extending. There had been cases where the owners would not agree to the Department's valuation and the restrictions had been continued for some months.

There were Foot and Mouth disease restrictions for the latter half of 1912; there was practically no Foot and Mouth disease in 1913. During 1912 there were certain ports from which swine might not be shipped. He did not consider that these restrictions affected the movement of swine to any great extent in the west of Ireland; so far as the north was concerned the restrictions applied only around Fermanagh, where there were outbreaks; and in Down and Antrim for a short period. The later outbreaks occurred mainly in the south of Ireland. Within the scheduled districts movement was greatly curtailed. Animals could, however, be moved from outside infected areas through those areas to another place outside them. So far as the districts actually under restrictions were concerned there was no shipping. Within the fifteen mile radius of the infected places animals could not be moved without licence, and live pigs would not be allowed out of the areas. The Department's officers, however, worked night and day inspecting stock and issuing licences to enable pigs to be sent to the factories, and did everything possible in order that the factories might have their supplies, though pigs were as liable to infection as other stock. A difficulty was that the sellers could not obtain the advantage of the competition they would have in the ordinary market. There was a short time when practically no animals could be exported to Great Britain, excluding horses, but when shipping was resumed for cattle it applied equally to pigs. In connection with the 1914 outbreaks, at the instance of the English Board of Agriculture a line was drawn across Ireland from the north of which animals could be shipped.

There was a period during which the swine from Ireland were all sent to Birmingham, but that was temporary only. In dealing with outbreaks of Foot and Mouth disease notified from this country the practice of the Board of Agriculture and Fisheries is to have the animals slaughtered at the port of debarkation within a short time after landing in Great Britain. The period for slaughter was first 24 hours, then extended to four days, and licences were later given to enable the animals to be sent to specified slaughter-houses in the interior of the country. At the commencement of the outbreak in Ireland the English Board insisted on the slaughter of animals on landing in Great Britain. This course was prejudicial to the shipping of pigs. The Department were quite conversant with the difficulty, but they were not responsible for it. He would emphasise, however, the fact that during the period of the Foot and Mouth restrictions the Department exercised a wise discretion in facilitating people to have their live stock disposed of. There was a veterinary staff employed for practically nothing else but to facilitate the movement of stock within the restricted areas, though in doing so the Department were aware that they were inserting a certain amount of risk. In infected areas the least movement that can take place the more readily can the outbreak be got under control. There is less danger bringing in animals than allowing them out of restricted areas. The idea is to prevent as far as possible any movement within the area infected, as there are many ways in which the disease could be conveyed.

He was aware that there was a decrease in the number of pigs in Ireland in 1913, but so far as the restrictions arising out of swine fever or Foot and Mouth diseases in that or the previous year were concerned, there was nothing in his view that could appreciably affect the number of pigs kept.

In regard to the evidence given by Mr. Cook, of Sligo, in connection with the disease stated to be prevalent in that district, he would repeat that there is great difficulty in diagnosing swine fever. Diets of debarment often result in a discoloration of the skin, and these were the cause of a great deal of the disease known as "Diamond" in this country,

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Mr. D. S. PRENTICE, M.R.C.V.S.—continued.

as in Great Britain. There is a disease which somewhat resembles swine fever, but which is now known as swine erysipelas. It is known in most if not many parts of Ireland. It is not a scheduled disease, and so far as the Department is concerned, although he was willing to afford every information possible, he did not think the time had arrived when he could offer any opinion as to whether the disease should be scheduled under the Diseases of Animals Acts. Pigs suffering from erysipelas were often supposed to be suspected of having swine fever. The disease, however, is now becoming better known. He had heard of the evidence given by Mr. Cook, and had communicated with the local inspector, Mr. Hamilton, M.R.C.V.S., Bellina. Mr. Hamilton has a very wide experience of the district; he was the veterinary dispensary officer; he knew practically everyone in the whole area, and there could not be anyone better acquainted with the district in this respect. Mr. Hamilton's report was to the effect that the disease stated to exist in the Billa district was not known to him, nor was there any animal morbidly known to the police; he had made a practice of inquiring into matters of this nature when visiting the country, and invariably the recurrence of swine dying had on inquiry turned out to be grass sickness, or grossly exaggerated; so far as could be ascertained, swine fever did not exist in the district; some years ago swine were reported under the Swine Fever Order, and a number of cases of swine erysipelas were found; it might be that cases of this disease occurred from time to time without anything being said about it, but this was supposition only.

The disease affects the valves of the heart, and the pigs frequently die from heart disease, and often very suddenly. Post-mortem examination shows none of the symptoms of swine fever as regards the bowels, but growths are usually found on the valves of the heart, and the skin will be affected. The disease may be regarded as contagious. It might be possible for the disease to be epidemic in one townland, while others would be free. This had practically occurred in England. He believed the disease is due to an organism. As regards swine fever, in some countries a serum treatment had been attempted where a policy of segregation could be carried out, but the results had not been altogether encouraging; and all the statements made as to the success of the experiments should be accepted with caution. Moreover, the treatment could not be adopted without imposing severe restrictions. Mr. Hamilton's report, however, would indicate that the disease does not exist on any extensive scale in the district concerned. Distinction with ordinary limewash is of little or no use, unless the limewash is caustic when applied.

He had also seen the statement that suspected cases of swine fever were not reported for fear of the restrictions. As to the truth of this statement, the police in the district will be communicated with. The Department have at different times received information that a number of swine in a district were dying from one cause or another. Presently an inspector has been sent to make an inquiry, but has not been able to discover that the mortality (if such existed) was due to any specific disease.

The Department were not in a position to give effect to the suggestion made by Mr. F. W. Delany, of Longford, that their veterinary inspectors should devote more attention to markets and fairs, and pay occasional visits to farms. There appears to be practically seven thousand fairs held annually in Ireland, in addition to markets where animals are exposed for sale. The staff of veterinary inspectors is too limited even for present and more pressing duties. Under the Diseases of Animals Acts, local authorities, however, are empowered to have inspections at fairs, etc., made by their veterinary officers, but those bodies do not appear to be enthusiastic in the matter.

Reference had been made to the detection restrictions after animals from Ireland had been landed in Great Britain. The conditions governing export of swine to Great Britain are regulated by the English Board of Agriculture and Fisheries; and pigs are subject to two Orders of that Board, one dealing with fat pigs and another dealing entirely with store animals.

Mr. D. S. PRENTICE, M.R.C.V.S.—continued.

The provisions of the Orders differed to the extent that fat swine may be diseased from any port in Ireland to Great Britain after undergoing inspection by the Department's officers, and on landing, if still healthy, may be sent for slaughter to abattoirs, slaughterhouses, etc. So far as he was aware, this Order imposed little or no restriction on trade. The two hours' detention on landing, of course, applied to all animals, and could not be avoided.

As regards shipment of store swine, the Board's Order requires that the seller of store pigs shall submit a declaration that the animals have been for twenty-eight days in his possession and are healthy, and were not in contact with disease. At the place of shipment the buyer has to make a declaration that the pigs brought for shipment are those to which the previous declaration refers. If the special veterinary inspector finds those documents in order and the pigs healthy, he may issue a license for their shipment to any place in Great Britain, but they must remain for twenty-eight days at the place to which licensed. The Department informs the local authorities in Great Britain where the pigs have gone to, so that the animals may be kept under supervision. After twenty-eight days in Great Britain, the animals are allowed to go free, so far as this Order is concerned, unless they develop any symptoms of disease in the meantime.

Bonhams are sometimes shipped in crates; these crates are disinfected. Many of these pigs go to Ayrshire. The numbers of fat and store animals exported in recent years are shown in the following table:—

YEAR.	Fat Swine.	Store Swine.	Total.
1908 ..	693,103	34,864	637,972
1909 ..	641,601	28,319	569,920
1910 ..	478,922	26,158	505,080
1911 ..	262,791	1,032	263,823
1912 ..	409,610	19,930	429,430
1913 ..	448,678	33,829	481,907
1914 ..	371,537	19,930	387,476
1915 ..	314,891	10,237	325,128
1916 ..	301,576	22,479	324,055
1917 ..	323,574	18,746	342,340
1918 ..	283,145	12,076	295,241
1919 ..	187,422	12,874	200,296

Mr. W. H. TWANLEY, Rathcoole, Ballinacree.

Farmer, on the border line of Kildare and Wicklow. Had been breeding and feeding pigs for upwards of thirty years. He usually kept two sows and eight pigs, the bonhams being sold to small holders in the neighbourhood and dealers, at nine or ten weeks old.

Except during the period of the Foot and Mouth restrictions he found in recent years that more sows were coming to his house; the effect of the restrictions was purely temporary, and he believed that the industry is expanding. The great majority of the bonhams are bought by dealers who bring them to Dublin market, and many people make their living by this trade. He was informed that a number of the bonhams there are more bonhams bred than pigs fattened; the latter industry being carried on by workmen and small holders principally. The small farmers keep the sows. Many of the larger farmers keep sows, but invariably prior to sell off the young pigs when worth about 25/- each, but when sheep and cattle are paying these farmers do not think of pigs in any number. They do not like the cooking of food or minding sows at farrowing time. The smaller farmers do this themselves and find the business pays. Pigs require the personal attention which the small holder can give them but which the large farmer cannot afford. All the farm labourers keep pigs, they buy the bonhams and fatten for four months, finishing three batches in the year, the pig being about six months old when disposed of.

The price of bought-in materials have risen, but much of the food is grown on the farm; potatoes, turnips, and mangels, brussels and small barley being

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Mr. W. H. Twissley—continued.

used. There is no milk available; in summer, however, when it is more plentiful, new milk may be given to boarhens; it puts a nice appearance on the animal, and for this purpose a little linseed cake meal is also often mixed up with the other food. If some circumstances were started he believed that more pigs would be kept, as sows and pigs go together. The question of starting a creamery in his district, however, might be abandoned. Whenever there is a village and small holders there will be pigs. The big backlog must look down on the pig keeper. There is a mill convenient where home grown stuff can be ground, and most of the small farmers grow enough food to feed pigs, sufficient small barley being available for this purpose. People, however, like to get in the bolt money for barley, and when they buy the Indian meal in limited quantities they don't notice the cost. The barley meal is given mixed with bean and steeped overnight in boiling water. When potatoes are not available turnips are used, and for this reason the extent of the potato crop has no appreciable effect on the number of pigs kept. Mangels mixed with meal is given to sows. Indian meal porridge is mixed with boiled turnips or potatoes. He would recommend that vegetables be grown for the summer feeding of sows, for which they are a very good food. Some farmers allowed the pigs to run on grass during the summer and fattened them off in a few weeks in autumn with satisfactory results. With the present demand for boarhens in his district he would prefer to confine himself to breeding, but he recognised that someone must fatten.

It is difficult to get labourers to attend to pigs on Sunday. He had not used much new food, but he would give this system a trial. If it proved to be practicable it would be a considerable factor in the saving of fuel and labour.

He had tried different breeds, including the Black, with the cross from which he was pleased, but the bacon cures would not have them. The Ulster boar of the proper type is liked best in the district as they breed boarhens which were suitable for the Dublin market. He looked upon the Black and the Ulster as being identical except for the colour. He has held premiums and kept the Ulsters. He wanted them, however, of immense length and size and not devoid of hair like most Ulsters. The York boar is not appreciated; they make firm work but were not suitable for the local trade in boarhens. He protested against Ulster boars being excluded from premiums in the three provinces, and he considered that a mistake was made in confining premiums to the Large York. He looked at the matter entirely from the breeder's point of view and was referring to boarhens when he said that the people of the district preferred the Ulster type. A number of these are fattened in Dublin. He fed a few himself and always got the top price and never had complaints. He kept pure bred Ulster and ordinary sows. Some of the Ulster boars which he

Mr. W. H. Twissley—continued.

got without hails were not successful. Those with nice soft hair and good length were the best. The York boars of the right type are good pigs, but it is hard to get them. There is also a good native breed in Westport approximating to the Ulster, but with more hair.

The Ulster cross makes 16 stone live weight at six months. The Large York will give the same return, but he objected to them on account of numbers in the litter not being even and satisfactory. His experience was that with a good Ulster boar most of the progeny come right.

He was under the impression that the County Committee of Agriculture is limited by the Department to subsidising Large Yorks, and a written document came to him from the Kildare Committee to that effect. He might have been under a misapprehension as he had not looked at the scheme, but was confident that this restriction applied to Kildare. It would be well to make the farmers quite clear on this point. If the bacon cures did not like the Ulster he was not prepared to express an opinion as to whether premiums should be given to the Ulster. The interests of the farmer should, however, receive consideration, and it should be open to the breeder to select the animal he wanted. He felt that if it were to be insisted upon that the Large York be kept in the neighbourhood the people would get out of pure bred pigs. At the same time he agreed that the County Committee would not be justified in subsidising a pig that would be unsuitable for the cures. Yet he believed well finished Ulster crosses will be bought by cures as well as York crosses.

He had read of the suggestion made by Mr. Byrne at Dandah regarding the allocation of money for prizes to young sows, which he thoroughly endorsed, as he believed it would tend to induce farmers to keep nice young sows for breeding purposes. He would, however, suggest 41 per sow instead of 50/-, the money to be expended in prizes at the two County Shows of Nass and Athy. Few premium boars are allocated in Kildare as he did not think the people wanted the Yorks. He realised, of course, that the influence of a good boar is far reaching, but there is a certainty that there will be good boars, while the proposed scheme would ensure the maintenance of a better class of sow, and the prospect of getting a prize would induce many people to keep a sow for breeding that they would otherwise dispose of for pork.

The variation of the prices for all classes of pigs is a great deterrent to carrying on the industry. The price of bacon in the shop is steady, but the price of pork is constantly fluctuating. He believed Messrs. Deau's prices varied to the extent of 4/- in the week; this was not in August last. This fact has a representative coming weekly to Athy and Balinginagh. If the bacon cures could maintain a steady price it would encourage fattening. The Royal District Council have provided pipettes in connection with their cottages.

## SEVENTEENTH PUBLIC SITTING.

SATURDAY, 19th DECEMBER, 1914.

AT 10.30 O'CLOCK, A.M.,

At the Offices of the Department of Agriculture, 4 Upper Merrion Street, Dublin.

## PRESENT:

Mr. JAMES S. GORDON, B.Sc. (Chairman).  
Mr. STEPHEN O'MARA.  
Mr. PATRICK CLARKE.

Mr. J. WHELAN, A.P.  
Mr. O. W. H. ROULSTONE, B.A.

Mr. J. O'MARA, Messrs. Donnelly, Ltd., Bacon  
Cures, Dublin.

Mr. J. O'Mara—continued.

Had been for twenty years connected with the Home and Foreign Produce Exchange, London, and desired to offer some observations on the fluctuations in prices

of bacon as affecting the decrease in the number of pigs in 1915. His closer experience of the industry in Ireland, which was limited to six or eight months, was not sufficient to enable him to assist the Committee otherwise in their inquiry.

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Mr. J. O'Mara—continued.

Mr. J. O'Mara—continued.

So far as the bacon curer is concerned his price for pigs is based on the return for bacon. The endeavour of the London agents is to advise their shippers at once of any change in prices; and, if they could, anticipate what the market price will be, so that their shippers would be able to regulate their supplies to get the advantage of the fluctuations.

When he went first to London in 1893 the Irish bacon trade was an important factor in the market, but the quantity of Irish bacon shipped to England last year was so small compared with the Danish that it practically did not count in fixing the price, which is regulated by the Danish, Dutch, Russian, and at one time Canadian supplies. Last year the Irish curers were killing 10,000 pigs weekly as against 50,000 in Denmark. Taking the last ten years the Irish output would be perhaps one-fourth or one-third of the Danish.

Another reason for the fluctuations is the public demand for mild cured bacon. Bacon is not cured to keep. Therefore when an agent receives large supplies—and the figures are practically public, the railways supply them—the stuff may be kept on his hands, and he is compelled to get rid of the bacon irrespective of price. If it were an article that would keep the fluctuations would be less. Formerly, and even in Liverpool at present, where there is a market for salt bacon, the price does not fluctuate to the same extent, the extreme fluctuation there being 1/- to 2/-, whilst he had known the London market to fall 14/- in seven to ten days, and this was attributable to the uncertainty of supplies of mild cured bacon, a class of article for which there is an increasing demand. When bacon fluctuates it is not natural that the price of pigs should correspond. These violent fluctuations of themselves show that there can be no ring and that the Irish bacon curers cannot fix the price. It had been suggested that the curers should arrange that their prices do not vary to the figure that the London market warrants, but that would be a very dangerous thing for the curers to do, and it would not be possible unless there was a trust. The extreme competition that at present exists between curers is better than anything else from the feeder's point of view.

The fundamental conditions of pig breeding, its adaptability to this country and the fact that it is a staple industry, had not, in his opinion, been brought sufficiently before the Irish farmer. He had in previous years called attention to this in the press. It might be taken for granted that the low prices which had prevailed in the past will never again prevail. America, which had been supplying bacon to the world, is going out of the export business. At one time its supplies were far more important on the London market than those of the Continent. Pigs in America numbered 60 millions as compared with 3 millions in Denmark. In the 'twenties about 80 per cent. of the American pigs were exported; but in the 'thirties only about 10 per cent. At the present time seven thousand boxes of American bacon arrive in Liverpool, where twenty years ago the number would be 25,000. In a few years time there would not be any. At the present time the Danish supply is of importance compared with American owing to the failure of the latter. The American supplies are going to meet the demands of her own increasing manufacturing population, who may actually become importers of bacon in the same way that they now import large quantities of cheese from Canada. Ten or fifteen years ago they exported frozen beef; they are now importing enormous quantities from the Argentine. If they have to import bacon it will put the Irish pig industry on a more stable basis, because there are no new sources of supply. It is, therefore, to the interest of our agriculturists to pay more attention to the breeding and feeding of pigs as there is likely to be a very good market for them for years to come. He thought the Department should make these matters known and educate the farmer to the fact that no matter how serious the fluctuations may be the average price of pigs must tend upwards. It was quite incorrect to say that when the number of pigs in Ireland went up the price went down, and vice versa. When the price is high here people get into pigs and pay dear for the stores; every one gets into pigs at the same time; bacon falls and

the farmer finds the return low. In Denmark pig raising is carried out more intelligently, and the industry is continued year in and year out. This is the only way to make money, and has been proved in Denmark, as no matter how low the price may be in London the Danes have kept on increasing the number of pigs, and ignore temporary fluctuations. In Canada, like Ireland, they regarded pig raising as a gamble—increased their holding of pigs when dear and sold out when cheap. Result, little or no increase in Canadian pig supplies.

The killing and curing capacities of the bacon factories of Ireland is much larger than the supply of pigs. For the past fortnight the Limerick factories had been working to their full capacity, but in his recollection this had not happened more than once before. The price is not firm, as he was paying 37/- that day, against 30/- a fortnight ago.

He obtained all his supplies through pig buyers and did not use the live scales. He thought this was an excellent system. It creates competition not alone among the curers but among the different buyers, including shippers, who would all be competing in the same way.

When these men bought as cheaply as they could, there is no ring, and competition was keen. The farmer does not sell to the first comer. He acknowledged that the dealer knew much better what he was doing than the farmer, and he also knows approximately the price he will get for the pig, while the farmer does not until buyers bid for his pigs. It sometimes happened that the shipping was better than the home price, and the competition of the shipper is good for the farmer. When the price they get from the curers is less than that obtaining across the water the dealer will ship the pigs instead of giving them to the curer. He did not consider that where there were scales and shippers there was less competition than where there were scales only. There may be cases where competition is not so keen, but he did not know of any pig fair at which he had got pigs and in which there had not been competition.

The buyers, however, could speak better on this point. It is possible that when there was a clashing of several fairs or a larger number of pigs were bought at the one time than curers could handle, smaller prices would be offered than if the supplies were better distributed, and he would favour something being done in the last mentioned connection. So far as they go the scales correct that.

The supply of pigs this week is unusually heavy. Nevertheless his average price is higher. The lower prices referred to were scales price. The different prices in different places would prove that there is no ring, and also prove that he, who had no scales and had to buy against shippers in the fair, was giving a higher price. If there has been any statement in prices it would be due to the abnormal number of pigs placed on the market. He had not known of any instance previously, and it had not affected the price in the fair. He believed that the live weight scales is not so good for the farmer as selling in the fair. It was from his own point of view that he discarded them. He had been brought up in an atmosphere of free competition and he believed that the ultimate price thus fixed is better than can be arranged otherwise. There is not sufficient competition against the scales, as in most towns there is but one.

He was not conversant with the conditions in other towns, but the bacon from the city of Dublin pigs is of second quality only. It is impossible for the curers to pay more, and personally he would not take Dublin fed pigs unless he was obliged to do so. The supply of pigs around Dublin is small, and he kept out of Dublin market if he could. These dealers do not resort enthusiastically to Indian and barley meals. He always gave 2/- less for Dublin fed pigs. He had known Limerick buyers to come to Dublin market, but it would be when they could not get supplies elsewhere. He got numbers of pigs from outside the city, however, and one of his buyers does practically nothing but purchases in County Dublin.

He intended placing before the Department several cases of delays in transit of pigs to Dublin from the West of Ireland.



DUBLIN, 1918 December, 1914.

Mr. WILLIAM SCULLY, Buyer for the Co-operative Bacon Curing Factory, Roscrea.

Mr. James Byrne—continued.

Stated that he bought over the scales, and was now able to pay as much for live weight as the farmers were formerly receiving for dead weight. The price paid by the Roscrea factory is not, however, higher than that paid in other southern centres, but the establishment of the Roscrea factory had been the means of maintaining a satisfactory price in the neighbourhood.

When he was buying for Roscrea his price for a particular market was the same as that of the other centres, and is arranged according to the price of bacon; it is governed by Messrs. Denny's quotation. Roscrea must follow the price of the other centres, whose figure he could not go beyond, unless he wanted the pigs very badly. The other centres, however, also raise the price when they particularly needed pigs. If he did not give as much as Denny's he would not be able to obtain supplies.

There was a day when prices could be made by the buyer, but that is no longer possible. Before the introduction of the scales there was no classification: the farmer was selling by choice, and could not get top price for the best class of animal; a fall in price was always promptly notified, but a rise was not made known so quickly. The price is now fairly uniform on the scales for the week.

While it is advantageous to have different methods of buying, the scales give the best return to the farmer. Before they were started the buyer had everything in his own hands, but has now to give the full price, as the farmer has the means of ascertaining the value of his pig. When there is more than one scales there is better competition, and the seller is more satisfied.

The practice adopted by some dealers of going out to houses in the country is most objectionable, as it deprives the farmer of competition, and anticipates the sale. The dealer is in a much better position to judge the value of a pig; while if the farmer has the option of the scales, he can have the animal weighed to ascertain its value. Many of the farmers now weigh their pigs before offering them to the dealer. At the same time he would not like to see the scale done away with, as there are numbers of pigs which the merchants cannot take; the jobber is a necessary evil, and all classes of competition should be encouraged.

The Large York is the breed of pigs principally kept in the neighbourhood. The Black is a great injury to the trade, as the factory cannot sell them; the heads will not be taken, and have to be boiled down for proddings; and the pigment in the skin is objectionable, so that while the bacon is good it cannot be sold. There are few Ulsters in the district. He had never got the pure-bred animals, but had got a few of the crosses, and found that they made a good enough quality of bacon. They required to be fed properly from birth, so as not to be overweight. A good Large York is the best pig, and its bacon is harder and closer; it would have a little more fat than the Ulster type; the latter is thin-skinned and hairless.

Mr. JAMES BYRNE, Antrim, Co. Wicklow.

Mr. Byrne stated he was a member of the Wicklow County Committee of Agriculture. He had been attending fairs and markets for forty-five years, and so far as the County Wicklow is concerned he was under the impression that pig-feeding is not carried on so extensively as heretofore in the county, but there is no falling off as regards the breeding side of the industry. The farmers prefer to sell the young pigs when eight to ten weeks old; those were, he thought, disposed of for sale in Dublin. The people do not care to undertake the feeding on account of the labour difficulty involved. The man with a large holding does not go in for pigs regularly; and the industry is chiefly dependent on the small medium holders, who do the work with their own family, one of whom usually attends to the sow. It is one pig only, and will pay well if properly cared. That class of farmer would rather more but for the difficulty of obtaining labour; domestic servants cannot be got to feed pigs,

and it is only when pigs are being turned into pork that the labour begins. The sow gets attention because she repays the expenditure, but the return from pork is not so quick.

The system of feeding pigs in Wicklow is primitive. There is no proper accommodation for housing or feeding, and some assistance and example should be afforded in these respects. There should be a proper yard, proper tails and facilities for cleaning, cooking and feeding. He had seen one such place in Wicklow. With suitable accommodation, between twenty and thirty pigs could be kept, and one man, who was perhaps too old for any other work, could readily attend to them; and this system should be economical. He suggested the establishment of example stations in different districts in the county, say, three in each parish, or even three in the county. The cost of providing the necessary buildings and equipment for each station would probably be £100; and he considered that the Government would be well justified in spending that money. He was confident that if the people were given the money on loan they would be willing to put up the necessary buildings. He would suggest that in the first instance the loan be given to a number of suitable people in approved places for the erection of model pigpens. He was quite sure many other farmers would then erect stations similar to the models, and that they would also avail of loans. The pig industry is a developing one; this country would eventually become dependent on the home production.

A plentiful supply of food, especially potatoes, grown on the farm, goes a long way to encourage pig-feeding, but the first objection is the labour. This arises more from the conditions under which pigs have to be fed than to anything he knew of. It was quite natural, under present conditions, for domestic servants to object to the work. He had never tried raw food, and did not believe that pigs could be raised on it. The price of feeding stuffs also influences the number of pigs kept. Farmers will always turn their attention to whatever pays best. The food will be given to cattle if a more profitable return can be obtained from them; but anything in the nature of sloshy work is objected to.

He was not quite satisfied with the markets over Wicklow generally. The dealers only had to be depended upon, and nothing better can be got than their price. He would favour the introduction of the scales and have the pigs sold by weight. The farmers would then know the value of the pigs; they had no idea of this at present. He thought that if the scales were more generally established, there should be no need for the dealers; the latter arrange not to go beyond a certain price; whilst he believed that there would always be sufficient competition amongst the owners to maintain the price. When there would be one scales only, the dealers would have to be depended upon to provide further competition. There are a few scales in the county such as at Skilleagh and Rathdrum; these have considerably improved the price, and there are more pigs fattened in the districts that have a scale. The pigs are brought to the scales the day before the fair and weighed; the farmers then hold out against the dealers in the fairs. When they have the dealers only the latter will have the advantage of the farmer in being able to judge the value better. In some cases the sellers are women who are not acquainted with what the pig is worth; and the dealer endeavours to get the pig as cheaply as possible. If everybody sold over the scales it would do away with the dealers altogether, though he had no special objection to these men. If they were done away with he was quite satisfied that the bacon cure would give a fair price.

He had no fault to find with the present breed of pigs. He thought, however, that there were two classes: the breeder's pig that will grow quick, and the pig that will suit the owner. The Black is the most thrifty and best animal for the farmer, but he admitted that the colour is objectionable, though he considered the bacon to be all right. The Black will be 16 stone at eight months, and will be as good as the York at ten months' old. To have the York finished at six months it would require to be fed from the beginning. It is the custom to allow pigs to run

DUBLIN, 10th December, 1914.

*Mr. James Byrne—continued.*

for ten months; when the potato crop comes in the pigs are fed a short time before selling; they then make heavy weights. He personally did not favour this system, as he thought it would be far better to feed a couple of lots in the year, and thus need to have it proper accommodation and feeding were available. Taking everything into consideration, the Large York is the best pig. It is the pig that the merchant wants, and the feeder had to study the merchant's requirements. For home purposes, however, the Black should be encouraged. He knew nothing about the Ulster. There is then a crossbred type, and many people are inclined to breed from it in preference to the York.

There are but a half dozen premium lears in the county, and these are Large Yorks. It is considered that the premium for boars does not pay, and the law fee that had to be charged is objected to; it barely paid for the attention required. If the boar is good the fee should be higher; for ordinary boars it is 1s. to 2s. While a fee beyond 1s. might in Wicklow prevent the premium boar from getting some of the sows, it would tend to the keeping of more premium animals. There is competition for premiums for all classes of this stock, and this shows that there are people anxious to have them. There is competition for the boar premiums, but the money is not available to provide a sufficient number; more funds should be allocated to the pig industry; at present the amount is negligible. He thought the County Committee would be justified in providing for at least twenty premiums. So far, there has been no money to give more than six. At the same time, he did not wish the amount for cattle and horses reduced.

In his opinion, more good boars and the introduction of a better system of feeding and housing pigs are needed to develop the industry. No matter, however, what their opinions may be, the small farmer will always realise what pays best, and he believed it was worth spending money to introduce a good system.

**Mr. T. WILKINLEY, Representing the Irish Agricultural Organisation Society.**

Stated that he had received very brief notice that the Irish Agricultural Organisation Society wished him to give evidence. Whilst he was more or less conversant with agricultural conditions over the whole country, his knowledge of the pig industry was mainly confined to Limerick and the neighbouring counties. In that part of the country he considered that more attention should be directed to the relationship that should exist between the creameries and pig production. At present several of these creameries sell the separated milk to a canning factory, which returned them about 8d. per gallon. It should be worth much more to the farmer for pig or calf-feeding. The Department's experiments on the relative values of different foods are the most useful in these countries, but the facts are not kept sufficiently before farmers. One fact is that 4 lb. of potatoes are equal to 1 lb. of meal, and 6 lb. of separated milk are equal to 1 lb. of meal. Accordingly, when meal is 28 per ton, the feeding value of separated milk should be 2d. per gallon. Apart, however, from the price obtained from the sale of the separated milk, the farmer fails to realise the extent to which he is exhausting his land by selling off all the milk, instead of feeding it to his stock on the farm.

Farmers are not men who read. These things have been published, but they do not reach the farmer. The one way to focus attention is the brief striking posters put up at the police houses. Have one "Feed separated milk to pigs," etc. He referred to local experiments later.

Other experiments that should be made better known are those relating to the use of raw food. He had not seen the results of the second set of experiments, and he now understood that these covered some of the points which he considered had not received attention when the first were undertaken. He was at present conducting an experiment with 20 pigs using raw peeled potatoes and turnips mixed with meal and fermented with hot water. The pigs have done very well. Most people know that store pigs can be

*Mr. T. Wilkinley—continued.*

maintained on mangels, but, with the addition of separated milk, they can also be fattened. This was the feeding he was giving at present on three farms which he was managing, and on which a number of pigs are kept. The ration consisted of 10 lb. peeled mangels, 3 lb. meal, and half gallon separated milk. There is a great saving in labour; and he thought the bother of cooking had caused many people to give up pig-feeding. In the winter months at these farms the food was cooked only for the last month of the feeding period.

In the tillage districts there is not much difficulty in feeding pigs in winter, but as the grass districts in summer pig-feeding is unprofitable, because everything has to be bought. There is, of course, a certain relationship between the price of pork and meal, but anyone dependent entirely upon bought in stuffs would in the long run be better out of the business. The system only suited a man with sufficient business ability to feed pigs on a large scale. It did not suit the farmer with 20 or 30 acres. The land should be filled to supply a great part of the food for which meal is now imported into this country.

He suggested that the Department carry out experiments in the feeding of pigs on forage crops. On the following system, which he had tried, 40 pigs could be fed out in summer as easily as 4 in the house.

In February he sowed vetches, and about April sowed a few pounds of giant rape broadcast over the ground, perhaps four rows, just when the other crop is coming through. Thirty pigs would be put on a statute acre, and enclosed with a movable wire fence. After three or four weeks the fence would be moved on. By the time they got to the end of the field the first part had grown again. A movable shed was provided to provide shelter from sun. He believed he was safe in saying that two sows of rape is better than one stone of potatoes for feeding to pigs. Where it is available, separated milk and rape form a better ration than the mixture of vetches and rape alone. A statute acre of rape will in summer furnish about 20 pigs. When sown in rows about 20 inches apart, the pigs will graze the rape about without trampling it. The pigs were allowed to eat the crop four times. The additional rations consisted of half gallon per day of separated milk, starting when the pig was 10 or 12 weeks old; in the milk morning and evening are mixed 1 lb. each of Indian meal and pollard; the animal then had only the rape during the day. He also used vetches mixed with treacle and hot water for the fattening of cattle, which, along with rape, produced prime beef without calves or mottles of any description.

On an old stubble he would sow vetches in September, to be made into hay in June. In the end of June and July giant rape would be sown for consumption by dairy cows from October to the following March. The part cut in October is ready for pigs about the middle of April, and in six or seven weeks is ready again. So long as it is not allowed to come into flower rape is a perennial. The advantage of having it is now is that the rows can be cut in summer to keep down weeds.

He had not made any comparative tests, but he would submit figures showing the actual increase in live weight and prices obtained.

He got the Board of Agriculture returns of the price of beef in the different towns during the previous week, and calculated from this what the price would be in Dublin. It is hard for the farmer to understand the quotations for pigs; within a certain limit he could ascertain the price of other stock, but he was himself quite unable to do it as regards pigs. There is a strong connection between the price of beef in the English market and in Dublin. The price in Birmingham, &c., is immediately affected by imports, and the Dublin and other prices would be regulated accordingly. Several items, such as the price of since beef, are not given in Dublin Market reports. With pork it appears to be different, and it is not possible to reason out the price in the same way. Of course, beef is consumed fresh, and pigs cannot be on the market as bacon for some time.

The results of local feeding experiments would depend a great deal upon the farmer with whom they

DUBLIN, 19th December, 1914.

Mr. T. Wiberley—continued.

Mr. T. Wiberley—continued.

are carried out. If conducted by leading farmers, under the direct supervision of the Department, it would be all right, but to would not have confidence in these experiments when carried out by the Agricultural Instructor merely under the auspices of the County Committee. The experiments involved considerable time and attention, and the instructor is too hard worked to show the best that is in him as regards to any experiments. He admitted that the only work to be done is the weighing of the pig at the beginning and end of the experiment, and keeping a note of the food consumed. It is not possible, however, always to secure a farmer known to be reliable, and who has the confidence of his neighbours. Experiments in charge of the agricultural instructor, acting under the direction of the County Committee, who supply the funds, are not nearly so good as those carried out by the Department directly, and by officers dealing with that work alone. It is difficult to make the farmer realise the value of an experiment, and the absolute necessity of adhering strictly to the various points. He would not say that every farmer is so careless, but a number of them are. He knew there were numbers of farmers who could be thoroughly relied upon; but if a large percentage of the experiments did not carry out the work properly, the results would be upset. He would modify his first statement by saying that he believed that the Department should carry out the experiments at their own stations, and by their own officers, and that the results would thus be much more reliable than those arrived at under the supervision of the county instructor with the aid of an untrained farmer. He himself paid attention only to experiments supervised directly by the Department officers. At the same time he acknowledged that farmers would appreciate far quicker the results obtained locally by one of themselves in whom they had confidence, as they could say that the Department had better facilities, and that the results were not obtained under conditions to which the average farmer is accustomed. He did not think, however, that the agricultural instructor could supervise the details of the local experiments sufficiently, and that even with the best intentions it was difficult for the farmer to carry out the work as it should be done.

He was now informed, and he continued in the statement, that the results of the experiments carried out by the agricultural instructors in Cork fully coincided with those conducted by the Department, and that they were carried out with sufficient accuracy to demonstrate to the farmers the benefit of raw feeding. This, however, was a simple experiment, and he was considering the general run of the experiments, which were more complicated. He agreed that simple experiments of this nature with raw food, or experiments in the nature of pig-feeding demonstrations, are excellent when carried out locally. He quite understood that one of the difficulties in regard to experiments at the Department's stations is that the agricultural community cannot keep in touch with them, as they are not in a position to watch the progress of the work in the same way that they could if the experiments were conducted by their neighbours. He fully admitted that a demonstration on the advantage of raw food or separated milk, though perhaps the results might not be so accurate as they might be when conducted at the Department's station, were best done by local farmers; but he would emphasise the difference between actual feeding experiments and experiments in the nature of demonstrations. He did not think there was any other way in which the results of experiments could so well be made known. His suggestion was that experiments be carried out now in the feeding of pigs on rape, vetches and peas, supplemented by concentrated food.

In the particular areas to which he had referred, some of the proprietary creameries wanted all the milk, and they got the farmers into the habit of selling it outright. The farmer was, in consequence, without feeding his calves or pigs. On the introduction of the co-operative creameries, when the system became changed, many of the farmers did not understand the use of separated milk. Some short statement should be made to show how much the farmer loses by selling all the milk off his farm, and to urge him to take back the separated milk for calves and pig-feeding. The I.A.O.S. were doing all they could in this connection. He was aware that some of the creameries had attempted to feed pigs for the purpose of utilizing the separated

milk, but this was getting the creamery manager to do work that should devolve upon the farmer himself. He did not think that the fact that the creamery could make a profit out of this business would induce the farmers to take it up. The practice of disposing of all the milk to the creamery has a tendency to make the farmer lazier, and to leave the bother of raising pigs to the creamery manager. The objection to having pigs about a creamery is that if on outbreak of swine fever occurred amongst a large number of pigs the situation would be serious.

He considered that wherever there was a good co-operative society composed of progressive farmers a bacon factory could be started with advantage. He knew districts, however, where the farmers were anxious to start such a concern, but he could not recommend it, because in these particular districts the farmers were not progressive and businesslike enough to run such a highly technical business as bacon factory. He could only recommend the establishment of such a factory with a view to securing a higher price than is paid already. The prices paid in the neighbourhood of a co-operative or other bacon factory are higher than are paid elsewhere. He had information that there are higher prices paid around Roscrea co-operative factory than at centres outside of this district, where the Roscrea factory does not influence prices. He was making the statement from his own knowledge. He had not compiled statistics, but he was constantly going about farms and could speak from his own experience. He did not know the number of pigs killed in Roscrea. He wished it to be clear that his argument as regards co-operation should not stand or fall by the policy adopted at Roscrea, or by the success or failure of any single co-operative concern. That factory is only starting, and a new concern cannot be expected to pry as well as one that has been long established.

He had referred to the statement, and he acknowledged the fact, that a small factory like Roscrea, dealing with 250 pigs weekly, could not affect the price of 35,000; but at the same time the fact that there was a possibility of other bacon factories being started on co-operative lines would put pig buyers on their metal, make them pay a better price, and prevent the formation of rings to the farmers' detriment. His contention was that Roscrea is paying better prices than where a bacon factory does not exist. The operations of Roscrea may not either improve or disimprove the price of pigs generally, but he asserted and he knew that better prices have been paid on several occasions in Roscrea than in districts where there is not a bacon factory. When Mr. Scully stated that he paid the same price only as Messrs. Denny and the other buyers, and that this price was governed by the quotations for bacon, he was referring to the price which the Roscrea factory paid to non-members of the Society; but probably Mr. Scully is paying a higher price to members than to outsiders, but apart from prices paid, members enjoyed many advantages over non-members. Another advantage attached to membership of the Roscrea Society is that when a man might have pigs ready in, say, the course of a week wanted a little money to be going on with, he could get payment in advance; this concession would not be granted to non-members. The arrangement, moreover, kept their members advised as far as possible of prices, etc. The whole object of the co-operative factory is to favour their members. Those who bring in their pigs get a better price, and that is according to the principle adopted by the creameries. The higher price in Roscrea is due to the fact that the merchants are competing against the Roscrea factory. It was not possible for him to submit figures to confirm his statement, and to show the prices paid for pork in the markets where the Roscrea buyers operate and the prices given by the other buyers elsewhere on the same day, remote from the Roscrea area.

Factories like Roscrea improve not only the price but the quality. It is easier to get farmers who go into Roscrea to modify their system of feeding than with other factories. Roscrea pays more for quality, and gets into better touch with the farmers who feed the pigs. If he was delivering a hog in the Roscrea neighbourhood, he might get an audience of about two hundred, whereas he might not have more than fifteen where there is not a co-operative factory; in other ways the Roscrea centre is more progressive.

## EIGHTEENTH PUBLIC SITTING.

MONDAY, 11TH JANUARY, 1915.

AT 10 O'CLOCK, A.M.

At the City Hall, Belfast.

## PRESIDENT :

MR. JAMES S. GORDON, B.Sc. (Chairman).  
MR. R. M. BOVA.  
MR. PATRICK CLARKE.

MR. J. WILKINSON, J.P.  
MR. O. W. H. HOSKINSON, B.A.

MR. T. A. MCCLURE, Killicps, Armagh.

MR. T. A. MCCLURE—continued.

MR. MCCLURE, Chairman of the Armagh County Committee of Agriculture, stated he was a farmer, and a breeder and feeder of pigs on a small scale. The shrinkage in 1913 he attributed to the comparative failure of the potato crop in the previous year; in several parts of the county the potatoes were not worth digging. This crop had a considerable influence on the number of pigs fed; and the effects of 1913 in this respect had not yet been got over.

Pigs are kept principally by the smaller holders and labourers, and to a limited extent only by the larger farmers. The former depend mainly on the potato crop. This feeding was not available in 1913, and a number of sows were killed off. In the end of 1911 and beginning of 1912 he understood that the price of Indian meal was high, while pork was low, and these factors had an effect also on the pig population; the potato crop, however, was the main factor; it would have a greater influence than the price of pork or of Indian meal except when the latter was very high, as pigs would be kept to utilize the offal from the potato crop. Besides potatoes, the feeding consisted of chopped corn (cut with flints), beans, pollard, and Indian meal; sometimes a mixture of Indian meal and ordinary corn is put through the mill; very little of the oats is sold from his district. There is no creamery, and a good supply of milk is always available. He had not calculated what price he should receive for pork to make a profit if Indian meal was 40 lbs. a ton. The food is all cooked, and it would be difficult to get farmers to give up this system, but the County Committee were carrying out experiments with food farmers to demonstrate the use of raw foods; it is, however, somewhat difficult to get farmers to carry out experiments in the way they should be conducted; they will not go to the necessary trouble, nevertheless these demonstrations would be much more effective than lectures. When completed, the results are published in the County Committee's Annual Report, which is circulated amongst the farmers, and in this way carried more weight than the results of experiments conducted by the Department at their central farms. The aim is to select farmers who can be relied upon to do the work correctly and in whom the people have confidence. As a matter of fact many more of these experiments would have been tried but for the difficulty which the Agricultural Instructor experienced in getting suitable farmers, and he did not think it was advisable to have the experiments at all unless the right class of men could be got.

There is no real scarcity of labour, and he did not think the bigger farmer was influenced in this respect as regards the feeding of pigs. Hiring is usually for a term of half-year and the wages would be £11 down-wards. Labourers employed throughout the year and housed by the farmer would be given 10/- to 12/- weekly. The latter would not have much extra, but the man paid 10/- would probably be allowed some ground for potatoes, which the farmer would till. The man in the Rural District Council cottages gets practically no more than the labourer housed by the farmer himself.

There is a large number of cottages erected by the Rural District Councils, and these are provided with

piggeries. This provision was not made at first, but in connection with cottages erected under former schemes pigsties have since been erected by the Councils. As a general rule three labourers feed pigs. Half an acre of land only is attached to each cottage, and it is not customary for the farmer to plough this for the labourer; it would not be worth while putting horses into it. The plot, however, is usually tilled. The rent of these cottages would be about 1/6 weekly.

In his opinion the price of bonhams would not seriously affect the number of pigs kept by labourers, and so far as he was aware labourers feed pigs all the time.

The man who feeds the pigs does not breed them but buys the bonhams or suckers at about six weeks old. At this age the bonhams would cost up to £2; this was last week's price. The small farmers are the breeders, but they do not usually fatten. Some large farmers, however, buy sows and rear and finish the bonhams.

The feeder tries to fatten three lots in the year and to turn the pigs out at 2 cwt. The aim is to have at least five lots in two years; or if possible six; so that the pig would not be more than 9½ months old. He would not consider 14 cwt. sufficient for four months feeding. The highest price is usually for 1½ to 2 cwt. dead weight in spring and summer. In the autumn 14 cwt. would be wanted. The pigs are killed according to the quotation prevailing. When the pig is over 2 cwt., however, there is a proportionately lower price given, but when fed longer it is not necessary to buy the suckers so often.

The price given for pork is fair, and as regards Armagh, good competition prevails in the market. He did not think there could be sufficient combination amongst buyers to ruin the market, neither did he consider that the practices referred to in Dundalk occurred except on a very rare occasion. A man may hold out for a still price and have to take a lower one at the finish, but the buying is done rather quickly, and it would not be possible for a buyer to remain at a cart and break down the price on a seller. A broker or runner might stop at a cart containing a big sow, but this would not seriously affect the price which the seller would eventually receive. If such a thing as marking a pig before it was sold were done the buyer would have to pay the top price of the market.

There were good pigs in Armagh twenty years ago, and he did not consider that the improvement since was appreciable; a finer class of animal is still required. So far as he knew there had been but few blunks; there was a black and white, a "belt"; as well as a rough class of animal of an orange colour—the Tamworth, he thought—but it has disappeared.

The Ulster is the most suitable breed for the county as it fattens quickly, but it requires to be graded up. At present it is somewhat coarse, and coarse or hairy suckers will not be bought, owing to the aversion to anything approaching the Large York, which it is considered takes too long to mature. The pig wanted is one with big long ears, without much hair, and not too heavy of bone, with good deep sides.

The old system of keeping pigs has disappeared.

BELFAST, 13th January, 1913.

Mr. T. A. McCleave—continued.

Mr. Josias Cunningham—continued.

and they now receive as much attention and are kept as well as any other stock on the farm, both as regards feeding and housing.

The County Committee had not sufficient applications for boars, and the full amount set aside for this scheme is not always availed of. At present all the premiums are given to Ulster boars. If there were more applications he believed that the Committee would be willing to allocate more money for sows. At first the premiums were given to Large Yorks; the people got to dislike these and premium animals got a bad name. Moreover, they do not like to pay £1, though he agreed that the former now got the best for nothing, as the first year's premium covered the cost. He would accordingly suggest that the Department select the boars earlier and sell them cheaper, say at £8. He did not think the new owner would use the boar too soon. Another way would be to make a present of the animal and give no premium and have the minimum of regulations. He thought the people in County Antrim at least could be relied upon to treat the animals properly.

He would agree that the breeder who keeps a pig for five months on the chance of its passing as a premium animal is at a loss if it is not taken off his hands at five months old. This class of pig when turned into pork does not command a high price. He considered that the Department ought to try marking at three or four months. He acknowledged that the boar marked at three months might not turn out satisfactory when six months old. The farmer, however, relying on his own judgment, buys an ordinary boar at three months old and takes his chances.

From his observations in the markets and fairs he thought that the number of pigs kept in the towns had decreased, and for this he thought the sanitary regulations were to some extent responsible. He did not consider that this decrease had been compensated for by an increase in the rural districts; he agreed, however, that the number kept over the whole country would be about the same as formerly.

Poultry is being more extensively maintained, and to some extent is taking the place of pigs with small holders; the capital required is not so heavy and the returns for both table birds and eggs are running a good deal higher. The County Committee had in fact approved of his recommendation that their station holders might be allowed to charge 1/3 a sitting for eggs all the year round instead of 1/4. It takes perhaps £25 to start one of the County Poultry Stations, and he thought that it was only fair that the holders should be allowed to charge a more reasonable price for eggs.

Mr. JOSIAS CUNNINGHAM, Glenastrin, Belfast.

Mr. Cunningham, representing the Royal Ulster Agricultural Society, stated he agreed that the shrinkage of sows numbers in 1913 would be due to low prices prevailing for pork in the previous year as well as the comparatively high price of feeding stuffs. In 1912 sows became very cheap, with the result that a number of sows were killed off, and the decrease in the number of pigs became evident in 1913; in the latter year also the high price for pork may have resulted in many sows being sent to the carcase instead of being retained for breeding.

He fed upwards of 400 pigs at a time, and he found the business profitable owing to the conditions under which he could carry it on. His principal difficulty is in getting labourers to attend to pigs. He could easily secure men to attend to cattle, but though he had been offering 25/- weekly, together with a house, potatoes, and milk, he had for a period of six months been unable to secure a suitable man to look after the pigs. He had three men engaged on this work, but they also attended to other duties.

In connection with his factory in Belfast he had a large quantity of offal on which the pigs were primarily maintained, and meat formed but a small proportion of the feeding. He understood that the ordinary feeders do not rely entirely upon Indian meal, but use potatoes, cabbage, &c. He had used both cooked and

raw foods. As a rule the food, including potatoes, would be cooked or steamed; but if he had to purchase all the feeding he would give it raw, as he was aware that extensive experiments conducted in America had proved that raw food gave the better result. Moreover the extended use of raw food would get over much of the labour difficulty. Whilst this is a matter that affected himself or any large farmer who fed a considerable number of pigs, he recognised that the industry is mainly dependent on small holders, who with their own families attend to most of the work. The sons and daughters of the small holders are, however, in recent years more inclined to adopt another outlook; many of them prefer to come into the city, whilst a number of the latter who remain at home take up poultry. Small holders and workmen are now also taking up the poultry industry in preference to pig feeding. There is less trouble with poultry and a good return can be obtained from the produce, particularly in recent years. This appeals more to the women of the house than pig feeding. A number of people are picking eggs in summer, and this supply when marketed in the winter tends to keep the price more uniform. Cattle rearing is of recent years receiving greater attention owing to the satisfactory prices prevailing; moreover they require much less attention. Whilst the increased cost of living in the city would probably average about 8/- the wages of 25/- or 24/- competes strongly against the supply of labour for agricultural purposes, and the influence of Belfast in this connection might extend for a radius of upwards of 30 miles. Many people in coming to the city have also in view the securing of employment for other members of their family; when they do not come to the city, a number may emigrate. Whilst he was not in a position to go into these figures as regards Austria and Down he was of opinion that these conditions prevented a greater number of pigs from being fed, and would, he thought, have an increasing influence.

The sanitary regulations, while necessary in the interests of the public health, had a considerable influence on the number of pigs kept in urban areas and also to some extent in rural districts. He was not, however, conversant with the details of the bye-laws in operation in this respect.

He remembered hundreds of pigs being brought from Belfast to London and he did not believe that he would now be able to procure many animals fed in the city. His own pigs were kept about 20 miles from Belfast and the offal to which he referred was raised there. Many of the people who formerly bred pigs now keep more poultry.

He was not aware of the extent to which the supply of Irish pork on the London market affected the price, but as he understood that it amounted to about one-third of the total it should have some influence. He considered that it is only a matter of time until the supplies of cheap American bacon which formerly competed with the Irish produce would become a negligible factor.

The steadily increasing supplies and competition from Denmark, however, had to be taken into account. The pig industry there is yearly extending and the natural conclusion is that they are satisfied with the price they are receiving. Should the Danish pork trade in British markets continue to develop, and the number of Irish pigs increase, the price for pigs in this country must tend downwards. Apart, therefore, from the general effect, the smaller the number of pigs raised in Ireland the better for the individual producer. So long as England continues to be a free market it will be used by other countries for the disposal of their stuff when favourable opportunities offer. When pork reaches a certain figure it will be sent in from Siberia, China, Serbia, &c. There is a certain margin at present in the value of Irish pork and that from the Continent, but this would cease to operate if large supplies of cheap Continental pork are placed on our markets.

There may be an average profit of £1 on each pig raised in Ireland, if the number be increased this margin may diminish. Accordingly whilst there should be an improved market for the Irish product as the American drops out, a considerable extension of

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*Mr. Josias Cunningham—continued.*

peg numbers in the country might not be at once desirable beyond the extent necessary to prevent foreign pigmen being tempted to send too large a quantity of stock over.

His own results might be regarded as supporting the view that 5 cwt. of meal or meal offal would make 1 cwt. of pork.

Good prices for pork will induce the farmers to feed pigs, provided the price of feeding is reasonable. The farmer prefers not to buy feeding when the price is high, but does not look as closely into the cost of what he grows on the land.

He bred a number of the pigs which he fattened, and bought in the others as stores. Though he had bred Yorks, half York and half Blacks, he found the Ulster, of which he bred a number, to be commercially the best pig, as he calculated on having it 1½ cwt. at six months old; they sometimes reached 17 lb. at that time, and he considered this satisfactory. He did not use milk or other means to force the animals in the manner that a number of feeders do. After 1½ cwt. dead weight his opinion is that the Large York does better than the Ulster. The York needs more time than the Ulster, but makes the best heavy weight pig. He thought the County Committee would do well to give the premiums to Ulster boars, as it is the only pig that will sell as suckers in the district, and is the best suited for the country generally.

He agreed with Mr. McCune as to the market value of premium boars. At five months old they should be worth practically 45 to pork. His opinion of "steers" is that they do not make a proper price, so that animals not accepted by the Department are hard to sell even at a great reduction for pork. Otherwise he thought the price might be reasonable enough, were it not for the trouble involved. He suggested that the animals be marked when three months old, and if suitable then the probability is that they would remain so, though much would depend on the way in which they were maintained for the succeeding three months.

He considered that a list of those competent to judge Ulster pigs should be compiled and that such persons only should be permitted to judge these animals at shows, etc. There should be a common understanding amongst them as to the standard type of Ulster pig. These men should also be in touch with the requirements of the cinema. A conference could be arranged between representatives of the breeders, the cinema, and the Royal Ulster Agricultural Society. The cures selected should be men who know the pig alive as well as dead. At the first selection he thought the scale of points conferred to what the cinema wanted, but the types are changing for the better, as he thought that an animal of finer quality and bone is being favoured. He knew of points being given at shows to pigs of the Large York type when shown in the Ulster classes.

He did not think there is a cross of the York through the proper Ulster type. Many of them when originally selected may have had a strong infusion of York blood, and this would show for a time.

Messrs. Coey and Co. had been in the habit of giving a prize for the pig most suitable for curing (irrespective of breed; that prize now goes to the Ulster). He crossed some of his Ulster sows with a black pig, but the progeny did not come pure black, and when killed they scraped practically white. He did not know how the cures liked them.

He was satisfied that there is keen competition in the buying of pigs and quite confident that in the northern markets there is no ring amongst cures. There is so much competition that quality is overlooked and on occasions when he could not say that his pork was that quality he had himself obtained the highest price. The fact that a market is over in about fifteen minutes is proof that the competition is keen. He had in the previous week been paid at the rate of 60/- per cwt. for 18 cwt. of pork.

The trade in live pigs for home cures is confined to a comparatively few people. Although there is a sum on the offer of approval of the present system of selling the pigs dead in the open market and having them

*Mr. Josias Cunningham—continued.*

weighed on the public scale. The small cures dealing with five to fifty pigs weekly would go out of the business altogether if they were obliged to slaughter the animals. The farmer should, however, be compelled to bring the pig to market within a short time after killing in order to enable the cure an opportunity of producing pork and lard of uniform quality. The cures now is to leave the pigs hanging for a day, especially in winter. In his business he required large quantities of lard, and he preferred to obtain it from southern cures for the reason that the northern lard is not of good quality on account of the way in which it is kept and handled. The animal lard requires to be eliminated from it at once. The buyers are not in a position to discriminate against pigs kept too long owing to the keen demand for supplies; it would, however, be an advantage if they could allow a lower price for unsatisfactory pork. The northern cures do not get the lard enough to enable them to have the highest quality.

He waived of occasions when the price was higher in England to ship the pigs alive, and for heavy animals a better return can be got by cross-Chambers' mares.

As a rule, however, he sold his pork in Belfast. He considered that all hams should be registered before being allowed to stand as stores, though he understood that legislation, which would be required for this object, is not feasible at present.

In view of the extent to which Denmark is capturing the British market for pork as well as an account of increasing foreign competition to the detriment of home production he favoured a protective tariff, though he also appreciated the difficulties in this connection.

**Mr. JOSEPH CARSON, Hillside Farm, Cough, Monaghan.**

Mr. Carson, a member of the Leicestershire County Committee of Agriculture, stated he was a farmer, and breeder and feeder. He considered that there is not much difference in the district from former years as regards the number of pigs kept. Owing to the high price of feeding stuffs in 1912 and the low price of pork, pig feeding was not paying and a number of sows were slaughtered; to this fact he attributed the shortage in 1913. The inferior potato crop in the previous year had also an influence, as irrespective of the price of pork sows will be more readily kept when feeding is plentiful. When the price of hampers is low, of course, some people would be discouraged from keeping sows, but with food cheap and potatoes plentiful the sows might be kept and the young pigs would be fed by someone. A plentiful crop of potatoes certainly induced the keeping of more pigs, and in ordinary circumstances dear meat causes a reduction in the number, whilst a good price for pork may tempt farmers to keep a greater number of pigs. With meal at 46 10s. or 47 he considered that pork should be 30/- or 32/6 to leave a profit; he had not, however, kept any records in this connection. Together with potatoes, Indian meal is the principal food, and when dear the price of other feeding stuffs is usually high in proportion. His practice was to use whatever feeding would be cheapest, and he accordingly gave a variety of foods such as ground oats, pollard, Indian meal, mangels, potatoes, etc.

The average age of pigs in the district would be about seven months; the consumption of food to make the last ½ cwt. is perhaps relatively smaller than that required for the first, as the pig gains on weight better after 14; and he liked to have a pig 2 cwt.

All the food has to be cooked, and this created a difficulty as regards labour on the large farms, where it is not only scarce but difficult to procure; men prefer any other work to feeding pigs. The breeding and feeding of pigs, is therefore, confined mainly to the smaller holders, most of whom have in their own families a sufficiency of help for this work.

As a rule there are no complaints in regard to marketing; farmers are satisfied when they get a good market; but on some days the price is down 2/- to 3/- from the previous week, and he did not know the reason. He would not say that the buyers arranged

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Mr. Joseph Carson—continued.

Mr. Joseph Carson—continued.

pigs or that it is possible for them to do so, but a more uniform price for hams and pork would encourage feeders. The fluctuations in pork prices were the only objection he had to the market. In a small market the price rises, and runs down; in other words the local supply regulates the price. When quotations are rising people are disposed to hold back supplies and perhaps rush them out when they are afraid that the price may soon drop. The buyers could not be blamed if the price does come down in such circumstances. He realised that their price is regulated solely by supply and demand, and that it is not easy for the curer to deal with an extra heavy quantity of pork; he agreed that the curer had their own difficulties in this matter.

The fact that farmers run in and out of the business may be responsible for the large fluctuations in price; this system he considered to be unprofitable as the man who keeps pigs continuously obtained the best return on account of being in a position to avail of a rising market. It takes 9 to 12 months to vary the supply, and when prices are rising the farmer cannot get into pigs at once. He understood that owing to the price now prevailing for Indian meal a number of sows that would otherwise be kept for breeding are being disposed of, but in the Cookstown district he did not think that there is any undue number of breeding sows being sold.

When the young pig is put in to feed it is finished as quickly as possible, and at seven months would be from 14 to 15. He had come to the conclusion that the Large Ulster is the most suitable breed for the district and that it met all requirements; it matures quicker than the York; he fully recognised, however, that this breed is not suitable for the southern curers.

Before the establishment of the Ulster breed, when he was feeding the York unsatisfactorily he had suggested to Messrs. Sinclair's representative that some pigs of another type should be selected and placed out as hogs, and that it would be to the advantage of the curer even if they had to give those hogs free; Messrs. Sinclair took the matter up, and he understood that subsequently in conjunction with the Royal Ulster Society and the Department experiments were conducted which eventually resulted in the establishment of the present herd book. A good type of pig was selected as first, but some of the pigs now culled are unsuitable, and he had seen some of them which approached the York type. In order to maintain a proper standard he thought the Large Ulster hogs should be constantly inspected by a good man; those selected for the herd book are not now still enough and the best types are not always included. There should be a working arrangement between the breeders and curers as to the type of animal. Borens are at present selected before entry, but sows are not. In his opinion every animal should be carefully inspected before being put on the register as some of the sows might not conform to the right type. His policy would be to eliminate all unsuitable animals if the breed is to be graded up. He had no doubt that it would be a hardship if the pure bred progeny of a registered sire were rejected, but it would eventually improve the breed, which is now in its early stages, so that for some time the inspection should be more rigid.

Borens for premiums should be inspected at an earlier age. They could be allowed to run together until four months old; they then needed to be separated, and every breeder has not sufficient accommodation for this purpose. His practice is to pick out the borens which he considers the Department's inspector will be likely to pass, with the result that two only had been rejected; for these animals he had to accept a very much lower price. The pig that would be suitable at four months would pass at any time, though he agreed that if given out at this age it would probably be used to its own detriment. It could, however, be selected and left with the breeder until five months old. An unsuitable bore could be culled not later than four months old without unduly interfering with its pork value; the selection of borens when four months old would undoubtedly be an advantage to the breeder. It did not pay him when the animal had to be kept for six months; if kept more than five he thought the

Department might fairly allow some extra payment. Unless a few animals kept for breeding he sold the remainder of his pigs as hams or pork.

Taking into consideration the various interests, he thought the County Committee had divided the funds at their disposal to the best advantage. There is no difficulty in having premiums for boars taken up, and if more money was available he believed that additional boars could be placed. On the supposition that the pig industry is bigger than it looks he would be inclined to agree that the County Committee should give a more substantial assistance out of their funds.

The poultry industry about Cookstown is paying well and is increasing; many of the smaller holders are now engaging in it, and he knew of people who had replaced pigs with poultry.

So far as he knew, the Rural District Councils had not erected pig sties in connection with their cottages. Although cottagers were probably keeping as many pigs as ever they did, the number so fed was not in his experience very large. To a certain extent when hams are dear the small feeders would not buy them for feeding.

Mr. JOHN McROBERT, J.P., Ballycotton, Crossgar, Co. Down.

Mr. McRobert, representing Royal Ulster Agricultural Society, stated he was a millowner and farmer, and had and fed upwards of 100 pigs annually. He agreed that the causes contributing to the decrease in pig numbers in 1912 were the high cost of feeding stuffs and low price of pork in the previous year. He was under the impression that pig feeding generally is not carried on so extensively as formerly. The potato crop, the price of bought-in feeding, and the current price of pork have an effect on the number of pigs kept. At present figure of 49 per ton for Indian meal the feeder would require to receive 70/- per cwt. for pork to make the business pay.

When Indian meal and other foodstuffs were cheaper he had been able, having not labour, etc., to maintain pigs at an average cost of 18d. weekly; the animals would be 14 cwt. at seven months, and the industry on that basis paid well. He had tried Indian meal alone, but did not find the system profitable. His opinion is that the best class of pig, even though costing more, gives the highest return.

He had found it impracticable to maintain so large a number of pigs as formerly owing to the difficulty of obtaining efficient labour. Moreover some labourers object to working on Sunday. He fired about twenty miles from Belfast, but this did not affect the labour supply. The families of the smaller holders display an increasing disinclination to attend to pigs; they are turning to poultry, which is easier work and out of which they can make more money. The feeding of pigs paid the small holder and labourer when he could produce hams at 20/- or 21/-, but many of these people are not in a position to pay 22.

Provided proper accommodation is available he did not consider that there is as much difference in the return from water as compared with summer feeding as some feeders thought. He preferred to have pigs fairly warm and sorted into batches of five or six of uniform size, and to have even lots of pork to market. Apart from a quantity of small potatoes, the bulk of the food which he gave consisted of boiled turnips and mangels, through which Indian meal is mixed. He would submit details of the feeding. He had great faith in ground oats, which he considered to be relatively cheaper than oatmeal, and the inclusion of the hull did not appear to make any difference; he gave also pollard and bran. In the middle of his pig-house he had a large boiler in which wood could be used as fuel.

He had a splendid market at Ballynahinch, where he got the top quotation of Belfast. The quantity of

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Mr. John M'Sherry, J.P.—continued.

pork offered, however, regulated the price so that as soon as the seller saw the extent of the market he could calculate what he would get for his pork. He acknowledged, however that this applied to all classes of these products. In view of the competition prevailing he was quite satisfied that it would be impossible for the buyers to have any combination to fix prices.

His policy would be to raise the class of pig required by the curer, and he was conversant with the requirements of the northern but not of the southern merchants. He kept sows, but no boars, and followed the progeny; he found the White Ulster breed quite satisfactory. He referred to whether pure bred or not, to the Large York, which he had previously tried.

In his opinion farmers would not rear and fatten more pigs unless a satisfactory price is received for the pork.

Mr. THOMAS LINDSAY, Deerybry House, Crossgar.

Mr. Lindsay, representing Royal Ulster Agricultural Society, stated he was a farmer, and breeder and feeder of pigs. In his opinion pig feeding is not carried on so extensively as formerly, and this he attributed to the higher price of foodstuffs in 1911 and 1912. Pork was low about the same time and a number of people gave up pigs. Other factors were the strike which occurred in 1912; the more remunerative returns for cattle and poultry; the difficulty of procuring fuel for cooking, and labour difficulties.

He did not think that the area under potatoes made any great difference, as the proportion of diseased tubers is less than formerly, and farmers prefer to sell those that are sound when the price is satisfactory. Eight hundred tons had been sent from the district for export on four days of last week, the price ranging from 42 1/2s. to 43s. The yield of the area only is used for pig feeding, and it is not customary to grow potatoes especially for this purpose.

If Indian meal consisted steadily at about 15/- per 24 cwt. bag, more pigs would be kept, as the farmer could better estimate the return, but he admitted that this could not be done. He had tried feeding two lots of pigs each competing half dozen, with dry and sloppy food, respectively, consisting of Indian meal, buttermilk, and cabbage; the lot fed on the dry meal appeared to have done better.

At one time there had been a lot of turf, which is not now available, whilst coal is dear, with the result that cooking is expensive. The use of raw food might help to overcome this difficulty, but there remained the question of labour. The larger farmers are doing with fewer domestic servants, and as these often attended to the feeding of the pigs the latter also are dispensed with. A few of the farmers go in for pigs on a fairly extensive scale, retaining a man specially to attend to them. The labour question does not affect to the same extent the smaller holders, upon whom the industry is now mainly dependent.

In view of the fact that servants do not take the same interest in pigs as formerly, he thought it might be an inducement to them if prices were offered, say, through local shors to servants on the larger farms who bring up the greatest number of pigs. He had not thought out the matter very fully, but he considered that the adoption of this suggestion would promote a spirit of emulation. Of course, portion of the prize should go to the farmer.

Many of the farmers find it profitable to feed milk to calves owing to the remunerative prices recently prevailing for cattle. There is a tendency on the part of a number of people, particularly labourers, to keep more poultry; the returns are better and quicker than those from pigs. The efforts of the County Poultry Inspector had been very successful and had encouraged a spirit of emulation amongst poultry keepers as regards the number of eggs raised.

Many breeders in Co. Down who formerly kept a couple of pigs find it difficult to do so since they have gone into occupation of the new cottages erected by

Mr. Thomas Lindsay—continued.

the Rural District Councils, on piggeries having been provided. This applied to upwards of seven hundred cottages in Downpatrick Union. He was informed that it was against the Council's regulations to put up a pighouse except at a certain distance from the dwelling. He considered it most desirable that piggeries should be provided by the Councils in connection with these cottages even though a small increase in the rent had to be made. The occupants look upon these cottages as their own and are not disposed to leave them. Accordingly when a cottager wants a piggy and is prepared to pay an additional rent in respect of it, he thought the Council would be justified in providing it. The cost could come from the same source as that for the original buildings. As no inducement to keep more pigs the Council might also be offered money grants for the largest production of pork in the year.

He had no observation to offer as regards markets. He killed his pigs and sent them direct to the curer, from whom he obtained the top quotation given in the daily press. He was confident that there is no combination amongst buyers to regulate prices. The daily press gets the price from the farmers in the market, and the firm he sold his pigs to returned him that price. If the price of pork could be kept steadier and the impact of losses saved when the price went below a certain figure it would be a step in the right direction. Farm produce did not fluctuate to the same extent as pork. If prices for cattle were low these animals could be maintained on the grass for a time, while the pig had to be fed consistently in order to obtain the highest price. If the farmer could be educated to the fact that those keeping pigs continuously are likely to obtain the best return it might tend to keep prices more uniform.

He had formerly kept Large Yorks, but the White Ulster is the type best suited to the district, and he now bred a number of them for entry in the breed book. He considered that the hours should be marked for premiums at any time after three months old, otherwise it would not be practicable to turn those that had to be castrated into good pork. Many people would prefer to get a three months old boar at 40/- paying 40/- or 50/- for an older animal in the show; and if they could buy at a lower price the boars would be changed more frequently. He concurred in the view that if the boars were sent out at three months many of them would be used, and that it would destroy the animal as a sire. If sent out at this age, however, the purchaser could be required to sign an undertaking not to use the boar until after a certain time. If he were himself buying a boar he would prefer that it should be five months old, as he would then have a better idea as to how it would turn out. When a boar older than five months had to be put out he thought the premium should be 40/-; the owners would rather have a bigger premium than have the boar raised. If the boar could be bought younger and cheaper the purchaser might be inclined to accept a lower premium. He was not conversant with the manner in which the County Committee of Agriculture allocated their funds for live stock or the amounts available for this purpose.

He had kept two boars of his own until six months old for inspection as premium animals, but they were not selected and were sold at a loss. He acknowledged that in keeping them he had to take his chance, and he knew of a number of breeders who had suffered likewise. The loss on a stag is greater proportionately than that on a bull as the latter if not passed for premium purposes may return a good price as beef. He had sent a number of black pigs to the curer with private marks, and on making inquiry the curer pronounced the bacon excellent and was surprised to learn that the pigs were of the Large Black type.

He thought the tendency in judging at the shows was to revert to the York type, as many of the judges were either breeders or of partial to that breed. He had seen York sows getting first prizes in the Ulster classes. When exhibiting sows, he thought, the Department should make it a condition that the judge be furnished with a standard list of points of the Ulster breed and be required to adhere to it.



BELFAST, 11th January, 1913.

Mr. FRANK ROBERTSON, Springfield House,  
Lisburn.

Mr. Frank Robertson—continued.

Farmer. Had for a considerable period kept both Large Yocks and Ulster pigs, was an exhibitor, and at times a judge at shows.

Previous to the close of 1912 pigs were very cheap and many farmers sold breeding stocks, so that a reduction was apparent in the following year. At the time pigs were cheap meat was high and young pigs were not bought, with the result that pork was scarce and dear in 1913. Labourers and small holders comprise the majority of the feeders in his district and buy the pigs for fattening; when young pigs and food-stuffs are cheap they feed more readily. These small holders do the work themselves and are not assisted by the labour difficulty with which the larger farmer has to contend. He personally had no trouble in this connection as the men who attended the cattle also fed the pigs. He fed raw, as he found this system to give equally good results as when the food was boiled. He allowed up to 4 lb. of meal daily, and he used it mixed with potatoes, turnips, mangolds, clover, rape, and vetches; everything, including the potatoes, was given raw; to some pigs he often fed the potatoes whole, and never had one of them choked. The food was not fermented. The roots were grown on sandy soil and were given after a rough cleaning, but not washed.

With meal at 2s a ton, perhaps 20/- would be a paying price for pork; the price of 1/6 per cwt small and refuse potatoes, etc., had, however, to be taken into consideration. He had sold pork as low as 33/-.

Buyers individually seem to compete keenly in the market, and top price is given for the good article. He did not think there could be anything in the nature of a combination.

He would not say that poultry is usurping the place of the pig, but much more poultry are certainly kept.

The majority of breeders sell the pigs as suckers, and anything approximating to the York type cannot be sold except at a reduced price. From his own experience he would not say that the Ulster fattens quicker. The York makes a greater weight in a given time and is the leaner pig, but the Black is most thrifty of all. The York will make 1½ cwt. dead weight in six to seven months; it has a thicker skin and stronger bone, and these are the objections to it in the north. He had sold a number of York pigs to the Asylum at Downpatrick and the authorities carried out a feeding experiment with the York and Ulster breeds. Messrs. Sinclair's buyer was brought in say which was the most suitable when killed for his table, and he decided on the Yorks. All the Ulster pigs were bought in the open market. He did not think there was much in the point that one breed fattened quicker than the other. A York will do in the winter when an Ulster will die from the effects of the cold; it will also thrive on coarse food that would not do for the Ulster; the latter is a quicker thriver up to 1 cwt., but after that weight the York improves much better. He was aware of the reasons why the southern owners objected to the Ulster pig.

He had bred and sold a number of boars to the Department for pneumonia. He did not consider 25 sufficient, as that is practically the pork price of the animal at five months old; and he had got as much when selling the sows of the litter for pork when going out at the same time as the boars. If the latter are not taken for breeding they would return an inferior

price for pork, though he personally had no experience of boars kept for premiums being either reported or left on his hands. He held over such animals only for inspection as he believed would pass the inspector, and he believed that if this were done by breeders generally much of the difficulty in this respect would be obviated. The price for boars selected should, however, be better. The best boars from the litter when sold to private breeders had often returned him 27 or 28/6, so that the Department were getting some second quality animals. The Department usually take the boars a week or so after being marked; but the animals would probably be six months old when going out. He was aware that the Department did not guarantee to buy approved pigs, but he had always found a good demand for any of the boars marked. It made a difference in the return to the breeder when the boar was left until it was over six months old.

He experienced considerable difficulty in having crates returned to him. He suggested that applicants for pneumonia boars be required to deposit with the County Secretary £2 10s. instead of £3, the 10s. to be refunded when the vendor notified the Secretary that the crate had been sent back.

So far as he had seen, there is no difficulty in regard to judging at shows. The man who gives prizes in an Ulster class to a York pig does not know his business. The points of the Ulster are laid down, and the breeders must keep them in view, so should the judge. It frequently happens that two classes only are provided at local shows (a) for the best sow, and (b) for the best pig. The Society do not care so long as the prizes are awarded, and the judge selected is often a man who can judge two or three classes of stock. In his opinion, since the Royal Ulster Society took the matter up the Ulster type has steadily improved to the detriment almost of all, and he agreed that the judge of these pigs at shows should be approved by the Society. The York pig has already been brought up to the desired shape, and his own idea would be to breed the York shape into the Ulster, with the exception of the drooping ears. There is a deep side on the York. The Large Black, the Berkshire, and the York were all of the same shape, and the policy should be to grade up the Ulster to a good shape to produce a good ham. The Ulster has finer skin and bone, and he was of opinion that the type is being graded up in this direction. The chief trouble with the Ulster is the variation in the skin; they have been bred out of the York. The buyer of dead pigs alone is not in a position to understand what the animal should be like.

He believed that what had ruined the York pig in the North was the fact that some middle Yorks were brought in and distributed through that part of the country, and had given the breed a bad name. But for this he did not believe that there would be the same objection to the York, as the main points of conformation of it and the Ulster agreed, there being a difference of characteristics only between the two types. A difficulty had also been caused by in-breeding.

He was inclined to think that many persons who had got swine fever into their herds would have been free of the disease had they given greater attention to the ventilation and cleanliness of the houses in which the pigs were housed, and allowed a larger proportion of green food. He did not favour the killing off of animals in herds affected by swine fever. He would prefer to have the housing and feeding attended to. He knew that the disease was caused by a germ, but pigs kept under defective conditions are more liable to it.

## NINETEENTH PUBLIC SITTING.

TUESDAY, 12TH JANUARY, 1915.

AT 10 O'CLOCK, A.M.

At the City Hall, Belfast.

## PRESENT:

Mr. JAMES S. GORDON, B.Sc. (Chairman).

Mr. R. N. BOYD.

Mr. STEPHEN O'MARA.

Mr. PATRICK CLYDE.

Mr. J. WALSHAM, A.P.

Mr. O. W. H. ROULSTON, B.A.

Mr. EDWARD GILLILAND, 67A Dunham Street,  
Belfast.

Mr. Edward Gilliland—continued.

Stated he tendered his own views as a shipper of live and dead pigs. He was under the impression that there had been a general decrease all over Ireland, and that this was attributable to the swine fever and Foot and Mouth restrictions. When a feeder discovered one of his pigs to be ill he reported the matter to the police, the place was inspected, one or two pigs taken and slaughtered, and an investigation held; all around that district became a prohibited area as regards the movement of swine, and in perhaps six weeks time it would be notified that there was no swine fever. Restrictions had sometimes been placed on the premises, even though pigs from the supposed infected place had not been in contact with them. The restrictions are so laid on both the buyer and farmer that the latter is discouraged from keeping pigs. He acknowledged that swine fever had always been a factor in regard to the industry, and that as the number of outbreaks was steadily decreasing a shrinkage in the number of pigs in any particular year could not be attributed to this cause.

He might have to cover an area of 20 miles in order to purchase 100 pigs. The farmer will sell more readily in the market than at his own place. If intended to be shipped as stores, each seller must make a declaration that he has had the animals in his possession for 28 days, and get a license from the local sergeant of police; this must go to the postal inspector with the name of the consignee. The pigs are kept for a period of from ten hours to four days at the post of declaration before being forwarded on to the consignee.

If these restrictions and regulations could be somewhat modified, it would encourage a greater development of the shipping industry. He knew that the Board of Agriculture in England were responsible for the regulations.

He bought and shipped every sort of pig, the greater number being sent in alive; and in the buying he relied on his own judgment as to the value; he knew of no arrangement amongst any of the buyers to fix a price, and in view of the factors regulating the trade he did not believe that this could be done. Irish shippers, at any rate, are working quite independently.

The price of pork has for some time past been satisfactory, but large supplies in Great Britain from Denmark and other Continental places cause prices to rule lower. The supplies on the British markets regulated the price, and it would be quite impossible for the Irish carvers or anyone connected with the bacon or pig trade to fix prices.

For a long time past carvers in England and Scotland are unable to procure enough Irish pigs, either dead or alive, and have had to turn to Denmark for the extra number required. In his opinion there is a satisfactory prospect for a large increase in supplies from this country, which, if available, would, he believed, be bought by cross-channel merchants in preference to Danish.

In city and suburban areas the sanitary bye-laws have prevented a number of people from feeding pigs. He was not in a position to furnish comparative figures, but from 1885 to 1892 he saw upwards of 1,000 pigs weekly bought alive in Belfast and shipped to the

other side; that number would now probably not exceed 100. He agreed that the interests of the public health had to be conserved, but new houses have since been erected, and the sanitary regulations prohibit pigs being kept in connection with them.

A good potato crop means a larger supply of pigs fed all over the country.

Owing to the rise in the price of Indian meal, pig-feeding on some would not be very profitable at present prices for pork, and this affected the number of pigs fed. He could not suggest any way of meeting high prices for imported food.

The pig known as the Large York is, in his opinion, best suited for the carver, and pays the feeder best. The Large Ulster breed is also very good, especially for the Northern trade. Both breeds suited the shipper. The Ulster is not so hardy, and does not stand the journey so well as the other, and when it shaves any trouble or mark the price is set, more so in this country, however, than in England. It has not so good an appearance after coming out of the ship as the English-fel animal. The English pork butcher is not so particular about blemishes as the Irish carver, as the pigs are cut up at once, and the damage has not the same opportunity of showing. The black pig with a little hair is a good hardy animal, and stands a long journey well. It is now taken by English buyers as readily as the white, but they do so only as a matter of the scarcity of supplies. He also sold pigs, 14 to 15 cwt., to Scotland for what is known as the Ayrshire trade, where the pigs are killed, skinned and the bacon sold.

His trade in heavy pigs with Birmingham, Manchester, Sheffield, etc., was at a standstill, owing to his being unable to get boats from Belfast to take the pigs alive. He had been sending them via Fleetwood, Barrow and Liverpool. The Hryham boat would never take live pigs from Belfast, and the others are now too crowded with cattle. It is not worth sending them to Birkenhead, owing to the handbills the pigs endure there.

Denmark is able to hold the market much better owing to the uniform supply; instead of merely reducing his stock in hard times, the Irish farmer gets out of pigs altogether. He believed that practically double the number of pigs could be raised in Ireland, especially in Cavan and Monaghan. He had never known a period when there were too many pigs for the English and Scotch trade. At times when the Continental stuff is cheap it may be taken instead of the Irish.

If he could count on having a uniform supply he could keep his customers from going to the Continent. He did not think English, and especially Scotch, farmers would go in for the trouble of breeding. They prefer the Irish store, which probably they can get cheaper for feeding than if they reared them. There are aromacies in Scotland in connection with which hundreds of pigs are fed. Before the shipper can make a profit, he must be able to buy the pigs fairly cheap; the usual price is 20/- to 25/- for those 10 to 12 weeks old. If such animals could be sent over more freely there would be a still greater demand for them, as thousands of carcasses of young pigs 60 lbs. to 90 lbs. each are now coming from Denmark for pork markets in England.

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Mr. Edward Gifford—continued.

Mr. George Ruddell—continued.

or Scotland; he believed that Irish supplies would be given a preference. At the same time he acknowledged that it might be better for the farmer to fatten the young pigs now sent over, but this additional market provided a great outlet for the breeder who should raise supplies for both markets. There has been a shortage in Ireland for a number of years, and the foreigner is taking the trade; not since the time when American bacon was coming in cheap has the supply of Irish pigs exceeded the demand.

In the end of 1911 and beginning of 1912 a number of breeding sows were disposed of, and this had also been his experience during the past three months. In order to make some of the sows look better, they had been sent to the boar a few weeks previously. He shipped such animals to sausage makers. He had at present an advertisement in every one of the northern papers asking for sows. Bonehams are also selling very cheaply; he had got from Drumshanbo 15 sows 8 to 12 weeks old at 9/- each. This is due to the high price of feeding stuffs. Very large numbers of sows are being killed off in Cavan, and the carcasses, say 25 to 40 lb. weight, sent in hampers to England via Belfast, Fleetwood and Heysham, where they are sold at 6/6 per lb. in London market. He feared that this killing off of sows and suckers would continue, and that there would be a dearth of pigs later.

He was now informed that the Committee were not in a position to deal with questions of transit, but he might mention that about ten days before Christmas, when buyers were getting their supplies of live pigs for the English trade, numbers of them were delayed for 14 days before they could be shipped, and many died in the telegraph. This was due to the strike, and to the fact that the Companies always take cattle in preference to pigs. He had not yet been able to trace a number of pigs sent away at that time, and out of one lot of 81 pigs, 4 were dead when they reached Leeds. Another lot was kept for 12 days at Birkenhead without anyone being notified by the authorities. Apart from the Dublin strike, he did not consider there were enough boats at Dublin. There is no luggage for pigs at Liverpool, and they must go to Birkenhead, but the boats going there are taking cattle only. At Blacklands and Birkenhead the pigs have to be slaughtered on landing, so that while pork is cheap in that locality, butchers in the interior have to pay higher. Were the restrictions done away with, farmers would be encouraged to breed more pigs for cross-channel markets, and still leave sufficient to be fattened at home. Before breeding would pay, however, the farmer should get 20/- to 25/- for bonehams.

Butchers on the other side like to get the pig alive, so that they may have the offal, which in a large pig would be worth about £1 when made up and sold to the best advantage; the butcher is satisfied with any little profit and the offal. When taken out here the transit is too long, and the offal becomes practically worthless.

Mr. GEORGE RUDDELL, Laurel Mount, Lurgan.

Stated he was a farmer and feeder of pigs. In 1912 pork got to such a low price that it left no margin for profit; the price of young pigs was reduced and brood sows were slaughtered. Feeding stuffs were also dear, but, even when high, pigs would be fed were the price of pork satisfactory. There is, however, a disinclination to buy Indian meal when it passes 20s. These factors resulted in a smaller number of pigs in 1912.

In his district a limited number only of pigs are bred, and he considered that pork-raising has declined; that farmers find it unprofitable, and have diverted their money into other channels; they are getting into better financial circumstances, and will not undertake the drudgery involved with pigs. Fuel is dear, and milk too valuable in this district.

There is difficulty in obtaining labour, especially on Sunday; it is not a question of wages, as workmen like to have Saturday afternoon and Sunday free. For this reason, and to avoid the cooking of food, he preferred to give the feeding, including small potatoes, to cattle. Owing to the good return at present from

cattle, the small holder preferred to feed calves. Labourers say they can do better in the factories than going to the farms. They are making 35/- to 45/- weekly when leaving morning, and his opinion is that wherever there are factories it will absorb the labour to the detriment of agriculture. The poorer or labouring class who were responsible for the feeding of a good number of pigs are now drifting into the towns.

Feeding, if dear, affects fattening, but not so much as potatoes, a plentiful cheap supply of which is the greatest inducement to fatten pigs. Early in the season there was a good crop and pigs were bought to consume them, but there is now a better market for potatoes. He had not gone minutely into the question of raw food, but from his experience he did not think it was satisfactory. The farmer, for the greater part, does not keep records, but use his judgment as to what pays best. He did not know of any breeders disposing of sows at present, but in view of the prevailing high price of feeding stuffs he anticipated that this would happen. In the previous week 25/- to 30/- was being asked for bonehams, but there was no sale for them. Many of the people who would otherwise buy them have perhaps as much to feed as they can provide for, in the way of cattle. Profits will not be satisfactory if the bonehams cannot be bought reasonable, and there must be a difference in the price of the store as compared with the finished animal. In November, when pigs are usually sold, the price is low, and this happened also when a large number were brought to a particular market. On a small market the price goes up. If the pigs are held back they get too heavy, and must be sold at a reduced price. It is never possible to count on what pork may bring owing to the fluctuations of the markets, which discourage farmers. There is no protection against the combine of pork buyers, and this combination is evident to anyone selling in the market. The farmer has nothing to do in the making of the price. He also objected to the sum of 6d. being deducted for carriage of the carcass. He admitted, however, that it was a recognised custom, and might be regarded in the nature of discount. Farmers are not suspicious when selling other farm produce, but they tell him they are disgusted with the fluctuations in the price of pork. He acknowledged that the quotations in the different towns correspond, but there is frequently a big reduction all round. He was aware that the great proportion of Irish pork went to Great Britain, and having regard to the factors which, he was now informed, controlled the London market, he recognised that they must also regulate the price of pigs in this country. He considered, however, that if the amount of pork is to be increased the market must be more reliable and feeding stuffs cheaper.

Owing to the sanitary laws there are very few pigs now fed in Lurgan, while ten or twelve years ago hundreds were fed, particularly by country people who came to the town. These bye-laws are becoming increasingly stringent. He admitted that they were absolutely necessary, but he had no doubt that they are too rigidly enforced. He considered that a lot of the house offal could be better fed to a pig under sanitary conditions than thrown into the rubbish heap, where it decays and becomes a nuisance; this practice also tends to unwhiteness on the part of small holders. At first the authorities prescribed the distance at which the pigs should be kept from the dwelling, but eventually they refused to allow the pigs to be kept in any circumstances. He had known of one case where they prohibited the keeping of pigs, although the animals were housed twenty yards from the dwelling, and the premises opened out to a field behind.

Mr. R. MACLEAN, Representing Ulster Curing Company, Ltd., Belfast.

Stated that he knew of no arrangement whatever between the representatives of different curing establishments as to what they would pay for pork. Each firm calculated what it could afford to pay at a particular market, and gave instructions to the buyers accordingly. The trouble usually is for each firm to get the supplies it required, and buyers have frequently

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Mr. R. Macdonald—continued.

Mr. S. A. Bell—continued.

to give too much for the pork, especially when a small number of pigs are marketed. He had seen equal competition in big markets, and it was incorrect to assume that a large market means a lower price, as irrespective of the quantity it will all be bought up. In the case of a small market the buyer would try to get as much of the pork as possible for his own firm, and the price that week might be a couple of shillings above the proper market value. This would have the effect of inducing farmers to bring out more pigs next week; when buyers saw they could easily get the supplies they wanted they would ease off the price. This would show that there is no combination amongst them. In the case of a big market the buyers back their judgment as to whether the large output is a temporary glut or otherwise. One seller could ascertain the price another was getting by looking at the signs on the buyer's yard for some of the pigs already sold to that buyer. The fluctuations would be due to the demand for pork on the other side, which is regulated by Continental supplies.

The apparent discrepancy between the wholesale quotations for pork and the retail price of bacon is due to the retailer who does not take temporary fluctuations into account. The larger grocers may vary their price in sympathy with the market, but the smaller man will not do so. It is to be remembered that the whole pig is not making the high price that the farmer thinks of; the best parts only return the high price. Different parts are sold at varying prices, and the retailer has to take a certain amount of wastage into account.

If the pig population in Ireland were increased by 25 per cent., he did not think prices would fall, but this would depend on Continental supplies. In view of diminishing imports from America, an increase in Ireland would be welcomed, but the Dares are taking up some of this trade which should provide an opening for Irish produce. The mill bacon which his firm was manufacturing is competing now with Danish and not American, but if pig numbers were increased in Ulster he thought the career was in a position to handle many more; they would certainly be ready to enlarge their premises to deal with any permanent increase. His firm could handle double the number they are now getting.

Mr. S. A. BELL, Postletham, Hillsborough, Co. Down.

Stated he was a farmer and breeder and fender, in County Down the farmer is the breeder, and pigs are fattened by the small holder and labourer. In his district feeding is earned on, but the pigs are bred in the vicinity. When sows and young pigs were plentiful and cheap, and prospects for pork did not seem satisfactory, the feeder did not want so many bonehams; this was reflected in the price of the latter, and a number of sows were killed off. The price of feeding stuffs had not such an effect on the sows. In 1912 sows were plentiful, and young pigs were so cheap that breeders fattened and sold 25 per cent. of the sows to cures. This had the effect of making bonehams scarce, and raising their price as high as £2 10s. each in 1916. More breeding sows are kept at present. Ten to twelve weeks old bonehams are cheap now, about 20/- to 25/-, but the demand is slow for the past month, and the price is gradually coming down. If existing prices for feeding stuffs and pork are maintained many farmers will probably reduce their stock. As had happened in 1912, the tendency will be to dispose of the sows whose bonehams cannot be sold. Pork is now 60/-, and even though a good price has been obtainable during the past two years, the high cost of feeding stuffs left no profit owing to the high price at which bonehams had to be purchased. Farmers estimate that it pays them better to sell potatoes when they can get £2 10s. At present prices, feeding pigs could not pay. Nevertheless, he would certainly keep on his own sows, as he believed that the person who keeps pigs continuously would obtain the best return.

The difficulty of the breeder is to dispose of his bonehams when there is no demand for them, as he has not always a sufficiency of feeding. In similar circumstances he had fed them, and resorted to the use of raw food. He had treated one lot only in this way,

and gave raw Indian meal, buttermilk and cabbage, together with some bran, and beside as a laxative, but this did not do any good; he had no potatoes at the time. Later on in September he fed boiled potatoes and turnips with a little pollard, and found that the pigs improved better. The practice is to feed quickly, and bring the pig to 2 cwt. dead weight at 6 months old. From his experience he did not think this could be done under eight months if the food were given raw. In order to make them thrive well, he considered that milk in some form is necessary. After a certain age the pig would probably be able to consume nearly seven pints daily. He had even then make 2½ cwt. at 6 months, but they would be fed by the small farmer, who usually gives milk. Labourers and small farmers are good feeders. If the farmer were independent of foreign food stuffs most pigs would be fed; a greater proportion of the feeding should be produced on his own land if the farmer is to obtain the highest return. His practice is to grow for pig-feeding beans and corn, and have them ground together; his land did not suit barley. The labour of cooking is a difficulty.

The small holder and labourer can make better pork than the large farmer, because they can give more attention to the pigs, which repay extra care. These feeders are quite independent of hired labour, whilst the large farmer cannot get anyone to give the necessary attention to sows, or to attend to pig-feeding, especially on Sunday; it is not a question of wages.

The numbers of poultry may have increased, but he did not think they were interfering with pig-keeping.

His experience always had been that when pigs are plentiful there is a fall in the price of pork.

What in ordinary circumstances the variation in the price of pork would not be more than 1/- to 2/- from week to week, there is always a difference in price between a large and a small market; pork would drop another 1/- or 2/- when there is a heavy supply. He submitted the following returns in support of this statement—

Ballymaknash Market.—17th December, 1914—162 pigs, price 54/- to 57/6. 24th December, 1914—50 market. 31st December, 1914—426 pigs, price 47/8 to 52/-.

Lisburn Market.—The owner of two pigs, weights 13.12 and 13.5, on 13th October obtained 63/- per cwt.; on 20th October two pigs from the same litter, weighing 13.10 and 13.11, respectively, returned 62/-; or a difference of 4/- in one week.

He acknowledged that when a good price is obtained on a particular day farmers bring out an extra quantity of pork at the succeeding market, and that they were accordingly, to a certain extent, responsible for the fluctuations, as he knew that the sows had difficulty in dealing with an abnormal supply, and he could not blame them if they reduced the price slightly. These fluctuations, however, have a great deal to do in discouraging pig-feeding, and make sellers suspicious that they are not being fairly dealt with.

He was satisfied that the White Ulster is the only breed of pig that could be sold in the district, as it is found that they grow into pork quicker. He had been working with the Large York for seven years, but eventually he could not sell them. He agreed with Mr. Robertson that the Ulster thrives well up to the first cut, and that the York may do better later on, but Mr. Robertson keeps a very good strain of Yorks. The Large York makes the best nurse, but he considered that one breed can be reared as easily as the other. From his experience he believed that the Ulster would be fat a month earlier than the York, but he thought it eat more, so that he could not say which animal could be more economically brought to the same weight. He had always maintained that in time the York is a nicer pig than the Ulster, but it takes longer to grow. The people want a quick maturing animal, and they believe this to be the Ulster.

If some pigs were derived of retaining young sows of the right stamp it would be the means of providing a more plentiful supply of young pigs; he was referring to sows of the Ulster breed where that was preferred, but otherwise he had no objection to the Large York. He could not suggest any definite scheme, and he admitted that it was a question of whether the business paid or not.

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Mr. S. A. Bell—continued

Mr. ANDREW BOGAN, Gainsborough, Ballyvaughan.

There is no shipping trade in live pigs from this district. Such an outlet would encourage breeders, and would leave housewives more plentiful for fattening. About ten weeks old a young pig would perhaps weigh 45 lb. Unless there is a good litter of nine or ten, an average price of £1 would hardly pay for the rearing. If the breeder could rely on this sum by having an additional outlet for the barrow, it would prevent him from being discouraged, as he now has sometimes to sell them off at a very low figure. Every inducement should be offered to keep breeding going on.

Mr. A. B. CLARK, Secretary, County Antrim Committee of Agriculture.

Appointed by the County Committee to give evidence as regards the provision which that body make for the swine-breeding industry.

The sum which could be spent on live stock is fixed by the Department, but the County Committee distribute that amount amongst the different classes of stock as they consider most desirable. Out of a total of £1,235 at their disposal for live stock, the Committee allocated £440 for horses, £759 for bulls, £35 for sheep, and £20 for swine; this provided premiums for three second-year and ten first-year boars, or thirteen in all. He had no difficulty in getting the premiums taken up. If more funds were not made for swine, he believed that a few additional boars could be located, but the Committee had not received any representations in this connection, and seemed to be satisfied that sufficient is now given for swine. Taking into account the large number of sows in the county, it was certainly evident that the Committee should afford greater assistance to the swine-breeding industry. On going into the results from the expenditure the return from pigs was far greater than from horses. On the facts now placed before him he agreed that the industry is an important one in the county, and deserving of special attention; if these facts were brought more fully before the County Committee he thought they would be inclined to afford the industry more assistance. Any additional allocation in favour of swine would, however, have to be made from the funds now devoted to horses or cattle.

The smaller farmer is not largely represented on the Committee, but many of the members are interested in pigs. No member of the Committee can himself obtain any advantage from the operation of the scheme, and is, therefore, in a position to have them administered for the general benefit. Were the small farmer more directly represented it is but natural that his interests would receive more consideration. He would offer no opinion as to whether it was desirable to alter the composition of the Committee.

The ordinary boar kept in the county is usually a good animal; though not entered in the land book, many of them might be as good as the registered ones. They are bought young, probably at two or three months old, and fairly cheap. The Antrim man likes to have his pig in pork at five months, and if a boar is kept after that age previous to selection for a premium, the present price of £6 is not attractive. He had not known of any boars marked by the Department being left on breeders' hands. His own opinion is that the premium for boars does not offer sufficient inducement to keep them, but at the same time none of the premiums had lapsed. Raising the fee to 2/- would be an advantage, as the charge for ordinary boars is from 2/6 to 3/6, and these are perhaps as good as the premium animals. He did not think owners would have any objection to paying a higher fee, and he believed that the time had arrived when breeders realise the value of a good sire. He agreed that the County Committee should have a discretion in this matter. He preferred some allowance being made in this way to increasing the amount of the premium and having a smaller number.

The County Committee had carried out experiments in regard to the use of raw and cooked food, and the results were in favour of the former.

Stated he was a farmer and breeder and feeder of pigs. So far as his own district was concerned, the potato crop in 1912 was satisfactory, and realised from 8/- to 4/6 in the early part of 1913. Potatoes were accordingly sold off instead of being fed to pigs. This high price was probably due to the failure of the crop in other parts of the country. The cost of meal has not the same effect as potatoes; when the latter are selling well, fewer pigs will be fed, and this is reflected in the sows. Farmers did not then increase their stock of pigs until they could judge the prospects of the 1913 potato crop, so that the decrease was only felt in 1913.

The sows had been done away with in the winter of 1912 and beginning of 1913. He kept two boars, and the average number of sows coming to them would be twenty per month. From August to December of 1912 the number was sixty or a little over ten monthly. There was a gradual increase up to December, 1912. Potatoes were cheap then, and this crop has a great influence on the number of pigs kept. Whilst pig-feeding is carried on as extensively as formerly, he considered that it was beginning to decline again owing to the high price now prevailing for potatoes. His observations during the past couple of months would lead him to infer that a considerable number of sows are being disposed of; sows are now 25/-, but there is no demand for them. In consequence, he anticipated that there would shortly be another decrease in the number of pigs. He had himself six sows at present, and in the circumstances would go in for more of them, as the time to have pigs is when everyone else is getting out of them; the person who keeps pigs all the time will get the best return.

The pigs are bred by the larger farmers, but the feeding is done by small holders, and to a slight extent by labourers. The price for ten weeks old suckers usually runs from 36/- to 40/-, and sometimes as high as 50/-. The larger farmer has a better supply of milk to feed sows; and his own belief is that it would pay better to breed than to fatten when £2 can be obtained for the suckers. In his district there is no difficulty in getting labourers to feed pigs; they will do whatever work is allotted to them.

Under the auspices of the County Committee of Agriculture he carried out an experiment to test the value of meal fed alone and meal and potatoes. There were three pigs in each lot; the experiment lasted from 1st August to 1st December. When starting the pigs were ten weeks old and were taken at the market value of 42 each. The meal lot weighed 215 lb. and the other 216 lb. He killed one pig in each lot on the first Thursday of November, when they weighed 13.2 and 13.0 after 14 weeks feeding; a fortnight later another from each lot was killed and they weighed 13.2 and 13.35. These fed on meal alone consumed 32 cwt. and the other lot 9 cwt. meal and 24 cwt. potatoes. Before potatoes only were used and were valued at 1/8 per cwt. and the potato cost 6/4 per cwt. The total weights of the carcasses when sold were 5.21 for the meal lot and 5.09 for the potato and meal lot. The pork of the first two realised 61/- and of the last four 63/- per cwt. The final results were—

Six young pigs valued at	215 0 0
Cost of feeding—	
Meal lot	5 18 0
Meal and potato lot	5 2 0
	25 0 0
Amount realised, 230 36s.; balance,	7 10 0

He did not like the advertised cooked food. He preferred meal mixed with boiled potatoes; and when meal alone is used he preferred to soak it. He had tried using potatoes, turnips, and meal raw to hoes only, but did not favour this system; he thought a larger quantity of meal was required and the animals did not appear to be in as good condition; he did not try any actual experiments.

He had carried out experiments to show that the total cost of feeding a pig in 44/-, made up as follows—

1 cwt. Indian meal	7 6
1 cwt. pollard or sharps	7 0
1 cwt. cut corn or oats	8 0
5 stones linseed	4 6
154 cwt. refuse potatoes	13 8
24 gallons skim or buttermilk	4 0

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Mr. Andrew Hagen—continued.

He allowed also 4/- for the work of feeding. He commenced feeding when the pig is about three weeks old, and allowing 10/- for the suckler and the sows part of rearing it, he was satisfied they left a good profit. From experiments he had carried out in stable feeding also he was satisfied that pigs paid better.

If the results of experiments similar to those which he had carried out were published in the local press it should have a good effect. He agreed that it would be useful to give a supply of leaflets on the subject to owners of boars to distribute to those bringing sows, as the information required to be brought directly to the notice of farmers. There is at present a large number of people who do not understand the feeding of pigs; many of them do not realise the necessity for giving the pigs a plentiful supply of fresh water. Pigs should be 1½ cwt. at six months old and be kept growing from the commencement. It is a waste of time and food to feed pigs to seven months. Six and a half months would probably be the average life of a pig. The suckler is sold at ten weeks old and four months are wanted on to finish it.

The food is a more powerful factor in regulating the number of pigs kept than the return for pork, the price of which is uncertain. Lately the price of pork at 60/- is satisfactory, but whenever there is a big market it is somewhat lower and the demand is not so keen. When the supply is small buyers are more anxious to purchase, and it is but natural that they would not be so keen on a big market. There are, however, no serious fluctuations; he considered that the marketing is quite fair, and he had no complaints to make.

He personally had experience of the Ulster type of pig only, and it alone can be sold in the district.

The premium boars are all pure bred White Ulsters. His own opinion would be that the first cross from the York and the Ulster would produce the most thrifty and best shaped animal. More depends on the sires than the breed, and there are good and bad strains of each breed. He avoided buying a nervous pig. The housing is an important factor. As a rule the pigs in the district are not well housed, but large farmers are improving their buildings. The small holder often keeps the pig in a place without light or ventilation. He did not approve of a yard for pigs as the tendency is to leave it too long without being cleaned; he preferred to arrange for the pigs to run out on the grass. He was himself at present erecting a model piggery on lines which he had thought out for some time. He recommended plenty of light because he believed that darkness causes pigs to be nervous, resulting in fits. In such cases he brought the sows and young pigs out to the light and gave doses of sulphate of iron.

He thought more poultry is being kept than formerly, and to a certain extent are taking the place of pigs amongst cottiers and small farmers. He understood that the returns from poultry are satisfactory when the industry is carried on to meet the requirements of the best markets.

He kept a good breed of pigs, but usually paid £3 for an ordinary boar; he also adopted the practice of getting a boar by means of exchange with another breeder. He bought the boar at ten weeks old, and it would be five months old before being fit for service and would then have cost him more than £5. He kept a premium animal, but whilst the first year premium of £5 paid, he did not think that the second year premium was sufficient. After this age he served the prescribed number of sows the service fee is raised to 2/6. The fee for the ordinary boar is 1/-, and he believed that if the fee for the premium boar were raised to the same figure it would be a greater inducement to keep premium animals, and the sows would continue to come just the same. In his own district, however, there was no other boar within a radius of ten miles south, east, or north-east, but there was one 4 miles direct north, and one direct west about 3 or 4 miles. People will send sows to the best sire. The returns required by the County Committee involved a considerable amount of trouble and the premium leaves little profit. If the County Committee wish to have more premiums taken up or to improve the ones they have they will either have to increase the premium or allow the fee to be raised.

Mr. THOMAS MCCUNNELL, Glenville, Bellinacorney, Co. Antrim.

Stated he was a farmer, and breeder and feeder of pigs. He kept four registered sows of the Large White Ulster breed, also two ordinary white sows. The progeny of these by a black boar given good results, as the first cross from two different breeds comes to maturity quicker. He could have them over 2 cwt. inside six months, whilst if bred pure it would take a month longer. For this reason he favoured the introduction of black boars. He agreed that whilst first crosses generally give the best returns the succeeding progeny are not so satisfactory, and he recognised that it would be necessary to maintain two pure breeds to obtain the desired result.

He had no difficulty in marketing the progeny of the Ulster and the Black boar, as a big strong pig always sells well irrespective of colour. Except for a very slight skin spot of them killed white with the ordinary treatment; a little of the black hair would, however, show. Even though the owners state that the Black is not suitable for their trade he considered that this breed should be kept and that the interests of the farmer should receive primary consideration.

When using pure bred Ulster sows and boars the results were unsatisfactory and a number of the farmers, even though well attended to, died off. The same sows when sent to the Black boar gave satisfactory results, and his own experience was entirely in favour of the Black. The black sow and white boar, however, did not give good results. He considered that the Ulsters were too inbred and not sufficiently hardy. The Department should have at their Agricultural Centre at Government a good black boar to make pig breeding in the district profitable. He personally had not sufficient time nor accommodation to keep a boar.

In the circumstances now explained to him as to the manner in which the black pig injured the bacon curing trade he could better appreciate the position of the Department and the County Committee in this matter and he agreed that it would not be justifiable to spend public money in subsidising this breed. He had been looking at the matter, however, entirely from the point of view of the individual.

He fed his pigs two-thirds on home grown stuff, including barley, oats, and wheat; the remaining third would be Indian meal, also potatoes. If this principle were adopted more generally it would put feeders in a better position as regards the price of bought-in foodstuffs. Pigs should provide a profitable market for home grown produce.

Although he was living entirely in a rural district, where there is no competition from factories, one of his main difficulties is in getting labour on Sunday. It is not a question of wages. He had about a thousand apple trees and was in a difficulty as regards labour for these also. Speaking for his own district, he thought there was sufficient labour to do much more tillage. Most of the land is now used for grazing in the district.

In January of last year he sold pork at 65/-; this year the price is 60/- only. He was not previously aware of the extent to which the home prices for pigs are regulated by foreign competition, and he now understood that the price of pigs in this country must follow the quotations for pork on the other side.

Mr. A. J. MORROW, Secretary, Down County Committee of Agriculture.

Mentioned that as the representatives appointed by the County Committee had not found it possible to be present he could give some information as to the operations of the Committee as regards the swine breeding industry.

The amount at the disposal of the County Committee for live stock is £1,085; of this £370 is given for horses, £1,000 for cattle, and £215 for swine; the last mentioned sum had been raised from £80 with a view to securing more applications for horses, as all the premiums had never yet been taken up. There are plenty of sows in some districts; nevertheless the premium boars will not be taken. There is a total of 91 boars in the county, but they are not equally divided; of these, twenty are premium animals.

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Mr. A. J. Morrow—continued.

The ordinary farmer does not like to be troubled with a bear or having scores coming about his place. The men who have bears are those who have followed this business for a number of years.

As regards the fee, he suggested a sliding scale, as a uniformly higher charge would hit the small farmer. In his opinion the £3 premium does not pay, and he did not favour the second year premium at all; few people keep the cubs bear two years. His idea would be to give a good premium for the one year. Even

Mr. A. J. Morrow—continued.

though the premium were increased to £7, however, he did not think there would be many more applications.

He had always maintained that the premium of £5 is not sufficient; were it somewhat increased and the service fee raised on a sliding scale it would be more attractive. Of course, the extra amount required would have to be taken from license or outfit, and he did not think the County Committee would be prepared to take it off the latter.

## TWENTIETH PUBLIC SITTING.

WEDNESDAY, 13th JANUARY, 1915.

AT 10 O'CLOCK, A.M.

At the Courthouse, Ballymena.

### PRESENT.

Mr. JAMES S. GORDON, B.Sc. (Chairman).

Mr. R. N. ROY.

Mr. STEPHEN O'MARA.

Mr. PATRICK CLEGG.

Mr. J. WILKINSON, J.P.

Mr. O. W. H. ROSTRANG, B.A.

Mr. S. S. YOUNG, J.P., Belfast, Coleraine.

Mr. S. S. Young, J.P.—continued.

Mr. Young, a member of the County Derry Committee of Agriculture, and a breeder and feeder, stated it was his experience that farmers are discontinuing pig-breeding, giving the food grown and brought to cows, and sending milk to the creameries; the separated milk, together with a little Indian or linseed meal, being fed to calves until they are upwards of eight months old. In view of the more profitable returns from calves, farmers are not keeping so many pigs. Where creameries have been started they have resulted in decreasing the number of pigs, as a steady supply of milk to the creamery has to be maintained. He was informed that Denmark is a dairy country, and that a greater number of pigs are kept there, but he was not conversant with the conditions prevailing in that country. Where house dairying is practiced more milk would be available, and when potatoes are cheap there is a greater tendency to feed pigs. Where potatoes are extensively grown, pigs are kept, but when the price goes beyond £2 per ton they are usually sold. Refuse and small potatoes go either to cattle or pigs, chiefly to the latter, and are sufficient to maintain a number throughout the year; the price of Indian meal, therefore, makes little difference. If there are no potatoes, and purchased foods have to be relied upon, the price of meal would be a larger factor. Up to a year or two ago pork was not above 45/-, while potatoes were selling at over 3/- per cwt., and it did not pay to feed them to pigs.

Few people have given up the industry entirely; they have merely reduced the stock. The feeders do not usually rear the pigs they fatten, but buy them as suckers in the market. He believed that latterly the breeder is getting the most of the profit; when bone-hams are cheap, however, the feeder can buy them to better advantage than if he reared them. Sows are kept by small holders, but those who breed do not fatten them; the larger farmers feed very few pigs. The industry is mainly dependent on the small holders and labourers, who have not much difficulty as regards labour, the work being done by their own families. On the large holdings it is becoming increasingly difficult to get domestic servants or labourers to attend to pigs. The boiling and making up of the food is objected to. If raw food could be used he believed it would get over a great part of the difficulty.

With Indian meal at 25 or 26 10s., and potatoes at 35/- per ton, pork should be 80/-, to leave a margin for

the feeder. He acknowledged that at these prices there should be a satisfactory return on the assumption that a ton of potatoes or 5 cwt. of meal made 1 cwt. of pork. Unthriftness or mortality amongst the pigs must, however, be taken into account.

Suckers would usually weigh about 30 lb. and cost 80/-. He would expect to make them 1½ cwt. when six months old. He had read a number of statistics relating to the returns from different classes of feeding given to live stock, and he noticed that the margin of profit was usually low.

He had tried giving beetroot, mangel and raw pulped potatoes with a little Indian meal or broken corn to sows in about the same quantity as would be fed cooked; while they were mistreated all right, they did not fatten. He had not, however, carried out any actual test. He was not previously aware of the value of separated milk as a food, as he had been of opinion that, given in any large quantity, it would be injurious.

Fluctuations in the price of pork, and the marketing, are not satisfactory, and lead one to think that there is a combination amongst buyers. On last Saturday in Coleraine there was a drop of 8/-, from 61/-, from the previous week, although the supply was normal. If the supply is exceptionally large there is a big drop in price, and people are aware of this. There may be a drop in Coleraine on Saturday, and a rise in the market held in Limerick on the following Monday. The variation may equal 4/- or 5/-, and this is a frequent occurrence. He would endeavour to obtain and submit to the Committee the list of prices paid in Coleraine and Limerick for a series of weeks. His contention was that the price for other classes of produce do not vary in the same way, and that these fluctuations influence people in the buying of pigs; moreover, the farmer finds he is not able to get the price which he has seen quoted for other markets.

The price for pork for the past two or three years has been satisfactory. He quite admitted that in a small market there is a scramble for supplies, and that it was only natural when supplies were plenty that buyers should not be so keen; at the same time there is not such a substantial difference in the supplies as to warrant the fluctuations. It is a frequent conclusion that a large market means a lower price; this does not apply to other farm produce. He acknowledged that these fluctuations showed that there is

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Mr. S. S. Young, J.P.—continued.

Mr. S. S. Young, J.P.—continued.

no combination amongst buyers, and that the effect of competition on the London market as now explained to him would regulate the price on pork in this country, but it did not account for the variation in the price on separate legs and small markets.

It would get over some of the present difficulties. If pigs were sold by live weight, the animal could be brought home when the price is unsatisfactory. He did not know, however, in what way the seller would ascertain the value, and he doubted whether the people would accept this system, so that a change from the present one would require consideration.

He would not say that it is prevalent, but it occasionally happens that some unscrupulous buyers put their own mark on the pig before the pig is brought, and so prevent another man making an offer. Until some time ago he was not aware that in such cases the buyer must pay the highest price of the market. He did not think this fact is sufficiently well known.

The charge for portership is a grievance. It is 4d. in his market. He acknowledged that it was a custom so long as he could remember, and that it might be regarded as a discount, but he objected to giving anything in the way of discount; he was under the impression that it is not a legal charge. While others grumble at it, he did not think it influenced anybody as regards the keeping of pigs. The *Coltains* Guardians, who feed a number of pigs, decided that they would not pay this charge. When the buyer heard of this decision he did not enforce payment, but the buyers refused to take any more pork, and the Guardians had to adopt another method of disposing of their pigs.

If there is the least scratch on the carcass, a fine of from 5s. downwards is inflicted; he would not object if the damage were serious, but he believed that when the bacon is finished or the ham smoked, the bruise or scratch would not be noticeable.

The Large Ulster is the pig favoured in the district, and he was satisfied that it is the most suitable. Sometimes it is spoiled by the introduction of York blood. He agreed that letterly premiums are generally confined to the Ulster, but a private breeder sometimes brings in a York sire; of course, if the progeny of the latter did not give satisfaction the sows would not continue to be sent to it, but some of its stock remains in the district. He had not tried the cross from the Ulster boar and the ordinary sow. The York pig turns out well, but do not grow so quickly as the Ulster. Twenty years ago he had a York sow and could not sell the progeny.

It was his experience that fancy sows of any breed brought at short notice are not prolific breeders. He had bought two such animals and found them unsatisfactory; it might be that they were not from a good strain, or that the treatment they receive does not fit them for breeding. He preferred to buy an ordinary sow from a prolific strain, and other people adopted the same policy. He would not condemn a sow for one small litter.

The amounts set aside by the County Committee for live stock are: Horses £100, cattle £205, and swine £55. He understood that all the premiums for hogs were taken up, but there is lesser competition for the bull premiums. Whilst £5 meant that the purchaser had the bear free, he considered this sum too small, as when finished breeding the bear is not worth much. He had no hesitation in saying that £55 for swine did more good than £100 for horses, and he was aware of the importance of the pig industry to the county. He had for a considerable time pressed for more money for swine, and for an increase in the value of the premiums. He would take the extra funds required from horses or cattle, and he thought it would be desirable to do so. In addition to giving a higher premium, it would help if the fee were raised. The fee for an ordinary boar is 5/6 to 3/-, and there would not be the slightest difficulty in getting 2/6 for the premium animal, as sows will be sent to a good sire. The fee, at any rate, should certainly be raised. He would suggest raising the premium to 4/6 now, and the fee to 3/-. There are men who will not keep a boar in any circumstances, and some encouragement must be given if the premium animals are to be housed.

The sanitary regulations have seriously affected the number of pigs kept in urban areas. He agreed that

in the interests of the public health they are necessary, but they are too severely enforced. He did not understand the details of the regulations, but they are as stringent as to prevent accidents in towns from keeping pigs.

He did not consider that the statistics regarding pigs in the county, prepared by the Constabulary should be made public, as they give the merchants too much information. It is not done in any other business. He could not agree that it was so useful to the farmer, as the merchant is better able to avail of the information, and it only caused the farmer to rush in or out of pig-keeping, thus creating fluctuations in price.

Although he could not submit any definite particulars on the subject, he was under the impression that bacon from abroad is sent over to this country comparatively fresh, dried and smoked here, and sold as home cured, and he thought this trade was not sufficiently supervised. He was now informed that the Department had a special staff to look after such matters.

The Rural District Council's cottages are not provided with pig sties, and these desirous of keeping pigs have to put up some buildings themselves. He considered it was a mistake that suitable accommodation was not erected in the first instance, as it would be an inducement to the occupier himself put up is not satisfactory.

He was not a poultry district, and poultry are not interfering with pig-keeping.

Mr. THOMAS MACAFEE, J.P., *Curryishaw House, Ballymenagh, County Antrim.*

Mr. Macafee, representing Royal Ulster Agricultural Society, stated he was a member of County Antrim Committee of Agriculture.

Formerly for twenty or twenty-five years he was a buyer for Messrs. Simlin, Rouse Curran, Belfast, but only within past four or five years he became interested in pig-raising from the farmer's point of view.

He did not think that the industry is carried on in the district to the same extent as some years ago. Farmers, especially the larger ones, are more inclined to devote their attention to cattle. The tendency to feed pigs is greater when potatoes are plentiful and cheap and when meat and oats can be procured at a reasonable price. A good return for pork also makes some people feed.

In his opinion, if a high price can be realised for potatoes, the tendency is to get out of pig-breeding and breeding, and there is a dearth in the following year; and when breeders or feeders try to get in again it is usually at the wrong time. This happened in 1912. Instead of maintaining the one business, the Irish farmer speculates too much. He sells potatoes when the price is good and disposes of sows, and in the following year he has no young pigs when the price for young pigs is high. He certainly thought that the person who keeps pigs continuously makes money.

He agreed that the poor potato crop in 1912 affected the number of pigs fed and sows kept, and that this was one of the causes of the shortage all over the county in the following year. The price of potatoes has a considerable effect on the number of pigs kept. If the farmer would grow more of the feeding on his own land it would make him independent of purchased stuff, and he was a firm believer in the policy of feeding as much of the produce as possible on the farm; it is the best way to improve the land.

Owing to the high price of potatoes and Indian meal at present, both are selling at a low figure, and sows will probably be disposed of. He was informed that, compared with a year ago, only half the number of sows are coming to a boar in his immediate district. When the young pigs come into the market they will probably be very cheap on account of the cost of feeding, and this will result in more of the sows being killed off, so that in another twelve months there will be a scarcity. He did not know how this could be avoided.



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Mr. THOMAS MACEFEE, J.P.—continued.

One reason why large farmers do not feed pigs to the same extent is on account of the labour difficulty. Domestic servants are less inclined to attend to pigs. Farmers who formerly kept breeding sows are unable to get labourers to devote the necessary attention to them, and those farmers are, therefore, not keeping anything like the same number of pigs as heretofore. Many of them have got out of the industry altogether. At the present time also they are finding cattle profitable. The small farmer is devoting his attention to breeding young pigs, and this side of the industry is developing owing to the higher prices that have prevailed for hockams. The small farmers and workmen feed pigs; they have their own labour to rely upon.

In other countries he gained the impression that more poultry were being kept, but he did not think this applied to Antrim. At any rate, they do not interfere with pigs.

He admitted that the fluctuations in the price of pork are detrimental to the industry, but too much is often made of the variation between large and small markets. In his time, when heavier salted bacon was used, the curer bought pigs during the months of the year only, and had in as much bacon in his stores as covered the summer months, when there was no killing. The trade now is in fresh pork and salted bacon, and if a merchant has more stuff on hand than he has a ready market for, he must save himself when he can. The merchant's price for pigs is regulated by the manner in which he can place his stuff on the market. If he buys more fresh stuff than his agents can find an outlet for, he must take a lower price, and this reflects later on the price of pigs.

He had experience with every county in Ireland, and he believed that the marketing of pigs dead is on the increase. The farmer has the offer at home, and he thought it would be difficult to change this system, which had in many centres replaced that of selling pigs alive. He was inevitably told that when sold alive the buyer is the better judge. He was not acquainted with the system, which he understood is now adopted in the south, of selling pigs alive over the coasts.

He was satisfied that the White Ulster is the breed for his district. In his opinion, the Large York had to be fed too long, and became too heavy before it is finished for the curer. The Ulster pig is fit to kill at any time after eight weeks weight. He was not acquainted with the class of York pigs now kept, or the conditions in the south.

He had been connected with shows for a number of years, and had judged several times at Belfast. He held that the proper man should be appointed to judge a particular type of animal. Those judging the White Ulster should be acquainted with that breed. The ordinary people are good judges of what they want, and the head of the pig is what they look to. He considered that a scale of points should be drawn up for the information of the judge. He was under the impression that at present the tendency is to lose the type of the Ulster; the animal is being bred down and made too fat. At the same time, he did not think the pigs now exhibited are in any way inferior to the first animals selected. He was opposed to crossing the Large York with the Ulster. The latter is becoming a favourite, and every possible means should be taken to maintain the type. It would be desirable to have a conference between the curers, breeders and judges as to the type to be aimed at. If this is not done the exhibition will cater for the taste of what he thinks a particular judge wants, irrespective of the proper type.

The County Antrim Agricultural Committee had more applications for premium boars than they could comply with. In view of the comparative values of a bull and boar he considered a premium of 25 sufficient. He would, however, take into consideration the small price that can be got for a boar as pork. In Antrim the premium for a bull is 21s., and there is no difficulty in getting them taken at this figure. If County Derry followed this example they would have more money for swine. He would advocate setting aside additional funds in Antrim for boars, as there are many more sows in the county than in Derry, but the funds would have to come from something else. He would certainly favour fixing the fee at 2/- at least.

Mr. JAMES D. CAIRNTH, Member, D. McCarthy, Bacon Curer, Ballymena.

Stated that his experience in the trade extended to about ten years.

In Ballymena market the price of pork fell from an average of 99/- in 1910 to 30/6 in 1911. The potato crop was poor and wheat dear in 1911, and the three factors tended to decrease the number of pigs, and this accounted for the shortage in 1911. Owing to the higher price since prevailing for pork, he thought that more attention is being given in the district to pig-feeding, and he was aware that in 1914 the number of pigs had come up to the normal.

There is only one root crop from which there is a supply of inferior produce for feeding, and that is potatoes. The extent of the potato crop is a considerable factor as regards the number of pigs fed. When good prices are realized for any crop it is sold instead of being fed to pigs.

His is a farming district, and there is a large amount of emigration, which intensifies the labour difficulty. If the land is going into grass and cows are kept, the milk could be utilised for pigs, but if grazing only is carried on feeding would not be available for pigs.

In 1911 there was an extra large supply of pigs, with a consequent fall in price. He agreed that the drop was due to factors outside this country; and that if pig numbers were increased steadily in Ireland it would probably not result in lowering the price. If an even supply could be maintained, it would be to the interest of everyone concerned in the industry. Fluctuating in and out of pig-feeding causes fluctuations in the price. If a uniform supply were maintained he could not say that curers would be in a position to prevent extreme fluctuations, as the trade is controlled by Danish supplies. The Danes send over an even number practically all the year round. The supply of pigs is bigger and the demand greater for bacon in winter, but so many cannot be handled by the curer in the summer. The price for bacon in summer is higher. A larger class of pig is handled in the north; he got practically no lame suitable for the Paris trade in the north of Ireland. The business cannot be viewed entirely from the Continental supplies. The Danish, not the American, market will continue to affect the industry in this country. He acknowledged that if curers cannot maintain a constant supply the customers will turn to American or Danish, and that the home merchant has difficulty in recovering the trade. He was informed that the Danish is as good as Irish bacon, and when put in at a low figure the price of the Irish must be cut to regain the trade; and that the only chance of the Irish curer to hold the market is to maintain regular supplies. He was also informed that the South of Ireland trade is governed entirely by the Continental supply. The same conditions more or less apply to the northern salt trade. If an English wholesale house can buy Danish fresh bacon cheaper than Irish at any margin over 8/- per cwt., which is approximately the cost of killing, they will do so instead of taking the Irish salt. If the Irish supply is not maintained it will give the Danes, who are increasing their output, a further hold of the market.

The curers in the north have facilities and equipment to handle a great many more pigs than they are getting. He could himself deal with nearly double his present supplies.

If American bacon drops out there is certainly a good opening for Irish pig-curers. The European war has closed out some of the Continental supplies, and for three years at least the Irish farmer should be in a good position. Russian and Siberian bacon is no longer coming up, and it will take Russia a long time to get back to normal conditions. The deciding factor here would be the price of feeding. He acknowledged that the conditions in this country and Denmark are different, and that Denmark had not cattle to turn to. If an average of four or five years were taken, farmers would find pigs a profitable industry.

He thought he was correct in saying that the southern curers work more or less in sympathy with one another; he did not say that there was anything in the nature of a ring. In the north, Messrs. Bissetts have a controlling influence, but there is absolutely no

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Mr James D. Corry—continued.

Mr. James D. Corry—continued.

combination or arrangement amongst the buyers. All the buyers are in the keenest possible competition, and in order to obtain supplies the buyers have frequently to exceed the price which they are instructed to give. If the market is bigger than usual, it is but natural that the buyer is not inclined to pay the same figure, but to adhere to the instructions he has received. If the matter were looked into more closely, he thought it would be found that a drop here is usually induced from the other side.

The average prices in Ballymena market were:—

1908, 42/11; 1909, 54/8; 1910, 59/0; 1911, 50/8; 1913, 53/11; 1913, 45/1; 1914, 58/3. Average, 56/.

He could not remember any drop of 4/- to 5/- from one market to another; the most would be 2/-.

He did not recollect any occasion on which his buyers went below the price he had estimated, whilst they are often obliged to go beyond it.

The charge for portage is a recognized custom, but he did not understand the need for it, and would prefer that it be abolished. So long as the custom prevails, however, he could not depart from it himself.

He thoroughly agreed that it would be desirable to have a competent person in each market to estimate any damage to pork, as at times there seems to be an epidemic of breakages, particularly in frosty weather, and the farmer does not realise the extent of the loss to the curer. A good deal of this damage depends on the butcher employed. He did not think any regular scale of fines could be drawn up, as the curer cannot estimate the damage until he has handled the pig, and the seller is not able to calculate it. If a scale were fixed it would have to be one to meet the maximum damage. If a competent person were appointed in some outside authority it would remove a source of grievance, as the less chance of friction between buyers and sellers the better. It would be a further advantage if the Department could have inspectors in the big markets to grade the pork. The quality now varies considerably, and the seller often gets full price for an uneven lot. The buyers are not in a position to discriminate or grade at present.

Whilst any bruise or scratch causes injury to the curer, the seller is not fined unless there is absolute necessity. He never made anything out of fines; it is an unpleasant business, and he would be very happy if he never had to resort to them.

One of the Department's inspectors brought into him a lot of six pigs. He did not know at the time how they were fed, but he was subsequently informed that three of them were fed on raw food and three on cooked. He weighed the bacon and hams of each fresh, again when salt, and finally in the roll. The reduction in every instance was normal at each stage, and there was no influential difference between the pigs dry fed and those that had received cooked meal. He considered it would be of great advantage if demonstrations on the use of raw food were carried out by local feeders, where the neighbours could see what was being done. He agreed that the results should be set forth in a simple form, and that the bacon curers might also distribute these leaflets. He would himself be very pleased to give a copy to every farmer who comes into his place, and also to some farmers by giving them a report on any pigs fed experimentally.

He submitted a cutting from a local paper advertising the use of cod-liver oil for delicate pigs. He pointed out that this material produces a very bad bacon, and damages the reputation of the Irish product. He had great difficulty when buying in selecting pigs fed in this way, as the bad quality does not show until the pork is cured. Several years ago a number of the manufacturers wrote to the Press warning farmers against this practice, and for some time it ceased, but it has now recommenced. Several rolls had been returned to him from England, over which he had been at a complete loss. He could not attribute the inferior quality to anything but the use of cod-liver oil, though it might have been due to the use of some compound salts. The bacon is oily and weak and the flavour objectionable. He thought the Department should issue some warning on the subject. It would be troublesome for the curer so to mark carcasses as to identify the supplier, as any mark is viewed with suspicion on the other side.

He was strongly in favour of the Department placing out well-bred boars and sows with anyone who will take them, either free or on easy terms. As a rule, he gets satisfactory pigs, but he wanted to increase the number. The work being done by the county bodies is infinitesimal—a much bigger scheme is required. The swine industry is an important one to Ireland, and it is an industry which belongs to the smaller and poorer farmers. It had been neglected in the past, and he thought it should receive a great deal more attention and consideration. Its importance does not appear to have been realised by the County Committees. Antrim has 60,000 pigs; that meant an output of 100,000 per annum, or a turn over of approximately half a million sterling yearly. As compared with the raising of horses or cattle, in connection with which there is comparatively little labour or employment, pig-raising involves a continual circulation of money and provides greater employment, and gives a quicker return to everyone concerned. He certainly thought the industry was deserving of more attention from the County Committee.

In regard to the reference that had been made to the sale of pigs in the curer's yard, he wished to state that many farmers insist on bringing their carts with pork into his yard; he usually protested, and urged these men to offer for sale in the established market. To such people, however, he paid the top market price.

Mr. R. M. CROTHEN, of Messrs. Morton and Simpson, Ltd., Ballymena.

Considered that the average feeder does not view the outlook for the industry impartially. He is deterred when meal is somewhat high, though at the same time he is probably getting the bonhams cheap; the saving effected in the purchase of the latter often counteracts the higher price of the meal. A cheap pig and dear meal is better than a dear pig and cheap meal. Prices are regulated by supply and demand. The industry is not paying now, and it may be paying well later. The farmer requires to be educated to realise that if the industry is carried on continuously it will pay eventually.

On account of dear feeding and the fact that young pigs are selling at a low price farmers are likely to be discouraged. He thought the State should accordingly step in and get the industry over the impending difficulty. To maintain the supply he suggested that the Department take up the matter thoroughly and establish a breeding farm in every county, at each of which 300 or 400 sows would be kept. The Department have found money to assist other industries, and if a good case is made for the pig raising industry he thought they should devote some of their funds to it. The breeding side of the business has been neglected, and for this reason he suggested that the Department should in present circumstances take it up for the purpose of supplying bonhams and carrying out experiments regarding the cost of production and feeding, the results of which could be issued to farmers. His case would to some extent be met if the County Committees made better provision for boars and local feeding experiments and furnished advice to pig raisers by means of leaflets and circulars and through their local instructors, but this would not altogether meet the difficulty. From what he had already heard the funds at the disposal of the Committee did not allow them to go far enough, and the local experiments carried out by farmers were not sufficient.

He believed that bonhams could be profitably reared at 25/-, but that figure seems low to breeders who have recently been getting such good prices. Moreover, the return from other farm stock is at present satisfactory.

It is absolutely untrue that there is any ring or combination amongst buyers. He thought it would be better for them if they could have a little understanding. Unless in exceptional circumstances there would not be a variation from market to market of more than 1/- or 2/-.

If the Department adopted his suggestion as regards county farms he thought a committee of the bacon curers should be formed and that the Department might have a quarterly meeting of the trade in

## BALLYMENA, 1914 January, 1915.

Mr. H. M. Crothers—continued

Mr. Arthur McKinlay—continued.

Dublin to keep in touch with the whole business of pig rearing and curing. He agreed that there might also be an interchange of opinion with the curers as to the best type of pig.

He had experienced similar trouble as Mr. McCarty regarding pigs fed on cod liver oil and had been able to trace the matter to its source. This feeder had been using pure cod liver oil.

He did not believe in the advocacy of fattening pigs with raw food, as his experience of it was that it produced bacon coarse in texture and much inferior in quality. In his view the fact that the Americans have never been able to approach the Irish producer in respect of quality was sufficient evidence in favour of cooked food.

Mr. ARCHIE SMITH, of Messrs. Smith and Co.,  
Merchants, Ballymena.

Qualified druggist, and supplied farmers with medicines and feeding stuffs. He had been for a time on a pig farm in America.

There is a considerable mortality amongst pigs, especially young pigs, and farmers have a good deal to learn as regards curative ailments, such as inflammation of the lungs, fits, rheumatism, etc. Farmers required instruction in these matters and to be better educated as regards feeding and the values of different foods: they are willing enough to learn. Cod liver oil is given to prevent pigs going down in their legs, especially in winter, when about 10 weeks old, and it is perhaps given more to young pigs than as a food to older animals. The bacon should not be affected under these conditions. He would not disagree with the former witness, but at 3/6 a gallon he did not consider that it would be much used for feeding.

Farmers are inclined to depend too much on Indian meal even though barley meal or some other food is cheaper. Some very inferior meal has recently been put on the market from which the oil had been extracted. He always guaranteed the stuff he sold, and took care to buy only meal with the full oil content. If every merchant did the same it would put an end to the sale of inferior stuff. The usual percentages of oil and albuminoids in Indian meal are 4 and 15 to 22 respectively. The oil is in fact often extracted to leave as low as one per cent. Indian meal is now high, but it had not long ago been sold for "future" delivery at 6 guineas per ton. Very often a feeder can buy sufficient supplies in this way.

He had always kept for distribution a supply of the Department's leaflets. He thought it was a great advantage to young farmers at Winter Agricultural Classes to be taken by the Agricultural Instructor and shown the housing and treatment of pigs. He would suggest that a number of parties of farmers be given similar facilities at the County Farm at Antrim. The experiments in pig feeding carried out by the instructors were also useful.

One of the factors in the local price of pork is that when pigs are going up farmers hold back supplies: the pig gets too heavy, and come in perhaps on a large market of heavy pigs and there is a big drop in price.

It would encourage breeding if there were more premium sires, there is a tendency now to go to the nearest boar. Taking a sow in the boar is a troublesome and difficult business, and they have at present often to be taken long distances. If a good sire were nearer the sow would probably be taken there. Instead of having two or three premium boars nearby together they should be divided up over the county.

Mr. ARTHUR MCKINLAY, Ballynagar, Derrook, Co.  
Antrim.

Stated he was a farmer, and breeder and feeder. He attributed the shrinkage in pig numbers to the good price for potatoes in 1912 and 1913, when sows were killed off, and to the good price of pork in the

early part of 1913. More young sows are sent to the boar when pork is not selling well in order to get a better return out of them. If pork is low and the cost of feeding stuffs high it would also influence the number of pigs. He had known of sows being destroyed when potatoes were making a good price and Indian meal was high. Many farmers consider that if potatoes average over 2/- per cwt. it is better to sell them. The price of potatoes has a considerable influence on the number of pigs fed. The distance potatoes have to be sent to a market is also taken into account. If the market is very distant the potatoes would be fed to pigs. It is November before the return from the potato crop can be fully estimated. In order to increase young stock a sow has to be sent away, and it is 24 weeks before the produce is fit to consume many potatoes. If pigs are fattened and killed it is six months before a new stock is available, and the potato supply is then over. If the young pigs are available they will be fed.

He sold 10 weeks old suckers at 20/-; and kept some which he subsequently disposed of as pork at 52/6 per cwt. It would have paid him better to have sold all as suckers except that they used up a quantity of refuse potatoes. Of course many people find it profitable to have pigs for this purpose. Ten weeks old suckers were up to 50/-, but they are cheaper now. He did not think any sows are being sold off, but it is probable that the present high price of feeding will have this effect. A number of young pigs are being bought for shipping and many are being sold in Belfast.

Three feeders in his district were in the habit of buying boneheads from him, they purchase all the feeding stuffs but do not pay for these or for the boneheads until the pig is killed; yet they always calculate on having an average profit of 2/-.

Labourers generally are not feeding so many pigs as heretofore, but are keeping more poultry. The price of young pigs recently prevented many of them from buying, and on this account a number of the smaller holders turned to poultry. He had never known labourers to refuse to feed pigs, and had no trouble in this connection.

Fluctuations in the price of pork impress people with a want of confidence in the trade, and the remark is often made that cured bacon does not go up and down with pork. The variation extends from 1/- to 3/- and occasionally 4/- per cwt. on a big market. It is at once realised that when the market is big the price will be lower; the buyers then take their time; on a small market they are much heavier. He had no complaint to make as to the buying as he recognised that it is a question of supply and demand, and he would not say that there is any combination. He cares his own principally, but what he buys is bought direct from the curer, and he found that the price did not fluctuate so much. When paying a high price the merchant tells him that the pork has been bought at the higher figure. He bought, however, in comparatively small quantities. If pigs are to be raised in larger numbers the market for them must be steadier, though he recognised the difficulty of effecting this in view of Continental supplies. The fluctuations which occurred locally in the marketing of poultry had been largely eliminated by the adoption of co-operative methods. The practice had been to hold over eggs on a rising market, with the result that the district got a bad name. They are now disposed of weekly. There were in the district co-operative poultry and agricultural societies. Already £1,000 had been subscribed towards a bacon curing factory, the establishment of which it was hoped would result in maintaining a more uniform price for pork; the people are to be told when to bring in the pigs and when to keep them; he was aware that it would be necessary to employ a good manager to give them reliable information, and he was confident that if the manager was able to make a good steady market the business would pay.

He favoured the appointment of a competent person at every weighbridge to examine pigs and report blemishes; that the scale of fines or deductions for the several blemishes be posted up, and that the buyer and seller should be bound by this scale. At present the system is to examine the pigs when the market is

BALLYMENA, 12th January, 1915.

Mr. Arthur McKisley—continued.

Mr. Thomas Wilson—continued.

over, and the seller is then at the mercy of the buyer, as if a dispute arises the farmer has no remedy. The market is over and another merchant does not care to interfere in any dispute of this sort. He agreed that it would not be easy to fix a scale as the full extent of the injury could not always be ascertained. Of course when he was dealing with decent buyers there was not much difficulty. The trader tests the pigs on the weighbridge but does not estimate the damage, and anything wrong is not known until a long time after. If the scale of fines were put up and the damage notified at once the seller would know what he had to meet. A number of farmers had been talking of holding a meeting with a view to having the arrangement adopted. The fines are now excessive and result in considerable overfeeding. He knew of one case where a cover wanted to impose a fine of 10/-; another offered to take in at 1/-, and the stuff was finally taken by first buyer without any fine. He had himself suffered a fine of 10/- from Messrs. Sinclair's buyers owing to part of the skin being mislaid. He had, however, been marketing large numbers of pigs during upwards of twenty years and had only been fined twice, but the fines are a hardship on the small supplier and a source of annoyance. On one day in Ballymena when the weather was warm the trader informed him that half the pigs in the market were "stewies."

The portage charge (4d.) has always been objected to. He was now informed that this item covers the cost of bringing the carcass to the owner's premises. He would not say that the 4d. perturbed anyone from keeping pigs.

The only breed that finds favour in the district is the Large Ulster. Some crosses of the York were tried but feeders did not care to buy them as young pigs, and cures would not give as good a price owing to the large heads and coarse bones. The Ulster returns the best price both for suckers and as pork. A quick maturing animal is wanted with good back and hams. Nobody objected to the thickness of the Yorks, but the people and the cures prefer the Ulster. Some years ago one or two premium bones of the York type came into the district and were objected to.

Mr. THOMAS WILSON, Cagherty, Boroughshane, Co. Antrim.

Stated he was a farmer, and breeder and feeder of pigs. He attributed the slumpage in 1912 to the fact that in the previous year pigs were cheap; and that when the price rose in 1913 a number of the sows were killed for pork instead of being kept for breeding. It might have been that they were killed off in the previous year owing to the low price for pork and high cost of feeding. He knew that in 1912 a number of sows were sold and that fewer went to the boar, and that in 1913 Mr. Read of Belfast bought a large number for shipping. During the past three years he did not think there were as many pigs kept in the district as formerly, and he had come to the conclusion that the killing off of breeding stock was responsible for the reduction.

Those who breed and feed pigs in the district are the small holders; the man with 20 or 30 acres does not keep so many as before. Those with 60 to 100 keep a good many and both breed and feed. On the larger holdings it is difficult to get labour or to have pigs fed, especially on Sundays. Labourers or domestic servants, who formerly attended to pigs, do not like the work, and the latter prefer to go into the local factories. On the small holding the work is done by the members of the farmer's or labourer's family. Pigs are not largely kept in the district. A number of the people send milk to a local creamery and feed the separated milk to calves. The land is usually tilled, and a small portion only remains in permanent pasture. Where potatoes are extensively grown the potatoes are to ship them; and the principal growers have no pigs. He knew of one case where very large quantities of refuse potatoes were fed to pigs.

He had kept records relating to one litter of 12 pigs. Eight were sold and the other four, which represented

the average, were retained and fed until 171 days old; they weighed 2.0.13, 1.3.20, 1.3.27, and 1.3.14 when sold on 24th November last. They were cut 1 1/2, but he got 57/- per cwt. for them. He did not know what food they consumed, but they made 1 1/2 cwt. daily. They were well fed, and he was satisfied with the return.

He considered that a bonus should be given to every small farmer to induce him to keep a good sow, and that a subsidy should also be granted to any farmer who kept 80 to 100 pigs.

It is not easy to bring in a sow to a show and some other encouragement besides prizes at these shows should be given. Very little assistance would result in the keeping of sows. He acknowledged that it would require a considerable expenditure to carry out the scheme he suggested, but he thought the small holder should be induced to go in now for breeding.

It might meet his case if the Department would buy good Ulster sows and give them out at cost price to small holders on condition that they were used for breeding; payment for the animals to be made in instalments.

Housing accommodation generally for pigs is satisfactory, and if the sows were supplied he did not anticipate difficulty in this respect. He did not think piggeries were provided in connection with the Rural District Council's cottages. He suggested that a piggery should be put up with every labourer's cottage.

Three premium bones are located in his district, but he did not consider that the number over the country is sufficient. This scheme is a useful one, and more bones should be placed out; where competition for the premiums is sufficient he agreed that it would not appear to be necessary to raise the value of the premiums but rather the number of premiums should be increased; at the same time he did not like to see any of the County Committee's funds diverted from other live stock, though he realized that the return from pigs was more satisfactory than from horses.

He admitted that in a county well worked up and organised there are more applicants for the different classes of premiums and that where advertisements only were relied upon the applications did not come in so freely.

Mr. CHARLES MacAULLEY, Cagherty, Boroughshane.

Agreed with the suggestion that there should be some scale of fines in respect of damaged pork and that the amount should be fixed by an official trier, who he suggested should be appointed by the Department, as it was not desirable that the onus of selecting him should be thrown upon either the owner or the seller; his qualifications should also be approved by an impartial authority.

He considered that the portage (6d.) is a grievance and should be got rid of.

A practice injuring the industry in Ballymena is that of allowing pork to be brought into the yard of the owner on market days. He did not know how many were sold in this way. The men who go to the yard get the same price as that prevailing in the market, but he believed farmers got fairer play in the market. The buyers should arrange to purchase in the open market daily. It would be easier for the buyers to settle this than the farmers. If the market is a quick one pigs are brought out on the roads before the market proper commences and sellers are deprived of the competition inside the market. The buyer pays the top price of the week authorized by his employer but circumstances may occur to rise the market above this figure, and people selling outside do not get the benefit. If the seller goes past any of the buyers on that road he will be boycotted when he comes into the market. He instanced where this had happened to himself. The only change in the market is that for weighing; there is no toll. He agreed as to the advisability of having a conference between cures and sellers to adjust these matters. He had been referring to Ballymena market only.

He was a member of the local agricultural society and for many years had favoured the preservation of

BALLYMENA, 18th January, 1915.

Mr. Charles Macaulay—continued.

Mr. Charles Macaulay—continued.

the Ulster breed, and he considered that more of these boars should be placed out, but he did not think the money should be taken from other classes of stock. The Department should supply the extra funds necessary. The York boars gave a bad name to the premium animal. The Ulster pig was a mongrel and had been improved by the York; but the proper type should now be conserved.

It would be an advantage if the labourer could have

facilities for obtaining pigs, and he believed the cost would be honestly repaid.

When the Rural District Council cottages were erected pigsties were overlooked, and this was a mistake. The people were so anxious to have the scheme passed at as low a rate as possible that many advantageous items were omitted. The Local Government Board were limit the expenditure on a cottage.

## TWENTY-FIRST PUBLIC SITTING.

THURSDAY, 14th JANUARY, 1915.

AT 10 O'CLOCK, A.M.

At the Courthouse, Londonderry.

### PRESENT.

Mr. JAMES S. GORDON, J.R.C. (Chairman).

Mr. B. N. BORN.

Mr. SEYMOUR O'HARA.

Mr. PATRICK CRENSHAW.

Mr. J. WILKINSON, J.P.

Mr. O. W. H. DOWLING, B.A.

Mr. R. J. McCLOSKEY, representing Messrs. Biggers, Ltd., Bacon Curers, Londonderry.

Mr. R. J. McCloskey—continued.

The price of pork went down to 42s. in 1913, but he considered that the decrease in pig numbers did not commence until the latter half of 1912, when farmers began to realize that the potato crop would be under the average, whilst, owing to the demand elsewhere, it was anticipated that the price of potatoes for export would be high and that more money could be made in this way than by feeding them to pigs. At the same time Indian meal went up to 25s. a ton, and young pigs were selling at 10s. to 12s.; breeders became discouraged, and from September to the end of the year sows were killed off wholesale, especially as they were returning a good price for shipping. What happened as regards the potatoes, however, was that they could not be exported for the expected market, and later on farmers had to pay exorbitant prices for pigs to consume the potatoes, and breeders had all the profit.

The indications at the present time are that another shortage is about to commence owing to the high prices being received for potatoes and the fact that Indian meal is upwards of 29s. He saw a number of breeding animals being killed, and he did not think young sows are being retained; moreover, suckers are not bought freely. He was told by his buyers in outlying districts that they could get at 10s. or 12s. Instead of being fattened, a large number of eight weeks old suckers are going to London for fresh pork, and shippers are making a good profit. This trade also took place in 1913 when young pigs went down to 12s.

He agreed that those who keep pigs continuously will make the most of them. This is the practice of the small holder, as the larger farmer gambles in the business. The industry may be regarded as depending upon the smaller and very small holder, and for this reason he emphasized the importance of affording them every assistance, especially as regards suitable pig sties. It would encourage many of the occupants of Rural District Council cottages to keep pigs if suitable accommodation had been provided for this purpose. Neither in connection with these houses nor labourers' dwellings generally is proper accommodation available. These people are not so speculative as the farmer and would continue to keep pigs if they had the necessary

facilities. Many small holders are now turning to poultry, as this industry gives quicker returns and appeals more to the women of the house; moreover, the work is cleaner.

Were it not for the enhanced cost of feeding, the prospects for pig feeders are satisfactory, and he would be paying 70s. for pork only for the big killings in Denmark owing to the decrease of food there. This will reduce the quantity of Danish pork later and should result in the Irish farmer getting 10s. over extra for pork. He had no information, however, as to the number of pigs still available in Denmark, and he acknowledged that the Danes were increasing their stocks, and that the prospective higher price for pork would probably induce them to maintain and even to increase the number of pigs raised in that country.

His firm dealt in roll bacon, which they disposed of in the north and midlands of England. The import there of American bacon is decreasing, but this was more than counterbalanced by additional supplies from Denmark. Even though the American continues to drop out, and that he could get a uniformly larger supply of Irish pork, he did not believe it would enable him to seize the market, as the Danish supply is ruling the price. Of course, a bigger and steadier supply from this country would enable home curers to maintain their position better, but as the price would then be likely to come down it might not be so good for the feeder. There is now little difference between the prices of Irish and Danish bacon. Any big quantity of good bacon affects the rolling trade indirectly. He agreed that the American has gone up in price and is competing against Irish. American long clear sides are now 46s., Danish about 38s., and Irish 36s. In the earlier part of 1914 he understood that American was dearer than Irish bacon, and this might have been due to the larger number of pigs in Ireland, but the supply of Danish was also high. He would offer no opinion as to whether in similar circumstances an increase in the number of pigs in Ireland would tend to reduce prices, as American is only purchased by a class of people who have a taste for it irrespective of price. As a result of the war, bacon which formerly went to the continent has now to find a market in these countries, but the Danish supplies may be regarded as the competitor of the Irish.

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Mr. R. J. McCloskie—continued.

What the quantity of American bacon has decreased within the past few years, the decline in value is not so marked. In the course of time America would probably, however, consume all the bacon produced there. This would be to the advantage of Ireland, if in the meantime the British market is not taken by the cheaper bacon from Russia and elsewhere. He agreed that the prospects for Irish feeders are satisfactory and that they should be encouraged to extend the industry. He thought the facts should be made generally known, provided the Department took the responsibility if the prices happened to go down.

What he often paid higher prices when getting the greatest number of pigs, he agreed that a general and sudden increase in numbers in Ireland would probably lower the price of Danish supplies were maintained. If the increase here were gradual, however, it would make little difference under normal conditions. He realised, of course, that an Irish increase of 25 per cent. would be a small percentage on the whole supply on the British markets. An increase here of ten per cent. at any time would not make any difference. His premises could accommodate a considerably larger number of pigs than he received, and many other causes were in a like position. The fluctuations in the supply which the curer is able to obtain is most injurious to the Irish trade. With a small quantity the curer is working for nothing, and he has, moreover, great difficulty in holding his customers, as the retailer turns to Danish bacon. At the same time, so long as Irish can be purchased at a reasonable figure it will be given a preference, as it is believed to be a better article, and a taste for Irish cured bacon has been established. He was aware that when Danish is cheap and Irish dear, the former is sold, but it is sold as rolled bacon without specifying it further. Of course this interfered with the Irish trade, as when there is a glut of Danish it is rolled and placed on the North English markets.

The curer has a fair idea of what he will get for his bacon when it is marketed after about fourteen days, but hams are not in the market for six to eight weeks, and the price for them cannot be so well anticipated. If he wanted to look for the market in advance he would not be influenced by American "futures." American quotations now receive very little consideration from Irish merchants. The price here is regulated solely by supply and demand on the other side, and this would be responsible for any sudden variation, but he thought it hardly possible that the price of pork from week to week would vary 4s. to 5s.

For about a fortnight at Christmas practically no pigs are killed; there is a special price for hams. When the big supply comes in afterwards prices would drop considerably, but he did not think the normal fluctuation would be more than 2s. or 3s. It is absolutely untrue to say that on a smaller market curers give a better price to induce feeders to bring out pigs, and when the pigs are not reduced the price. In a small market buyers are not able to adhere to their authorised figure; competition is keener, and they must go higher in order to obtain their supplies of pork. On a big market the buying is naturally easier. Owing to the number of small curers and the strong competition for pork, he was sorry to say that in the north a combination amongst buyers is impossible.

The price obtained by the farmer has no relation to that obtained by the curer. Shopkeepers are to a certain extent combined, and retail prices cannot be got up or down without difficulty. They find it so hard to get prices up that they often work for practically nothing; and when it has got up the retailers keep it as for some time, even though pork drops, under the impression that it may soon rise again. The retailer has made but a slight difference from the time pork was selling at 10s.; and the conclusion of the feeder is so far right when he says that someone is making the profit, but it is not the curer. If bacon increased 10s., the retailer's price would be the same, as he cannot put on a small rise. He cannot very well alter his price less than 1d.

Mr. R. J. McCloskie—continued.

per lb., whilst 10s. would be a very substantial rise or fall to the farmer. Yet though pork rose 10s. the return on parts of the offal are practically the same, so that the curer requires to obtain more than 10s. on the bacon and lard. The farmer does not always recollect that the best portions alone of the pig make the higher prices. The curer is paying 6d. or 7d. per pound for offal that returns him 2d. only.

The White Under pig is a satisfactory animal and quite suited to the requirements of the trade on the North, and, taking it all round, he wanted no change. For some trades it would be too fat.

It would be an advantage if sows could be supplied in the same way as boars, though he recognised at once that this would be an extensive and difficult scheme, but it would insure a healthier and better class of pig. It would have the effect also of introducing fresh blood and prevent in-breeding. He agreed that the introduction of boars went a good way in the same direction. He had no doubt plenty of farmers would be ready to take sows if the price was right. The Department might also breed a number of sows and send them out for the purpose of showing the class of animal that should be kept by farmers. Whilst it might not be possible to have an extensive scheme of this sort, it would be useful.

Sanitary regulations may mean less pigs, but if the towns are to be kept healthy and a good Irish bacon produced, it is far better to have the pigs in the country. He did not like town fed pigs, and in his opinion the sanitary regulations are both in the public interest and in the interest of Irish bacon. He did not consider that the regulations are too stringently enforced in the country, and such regulations as are enforced are absolutely necessary.

He had occasionally had complaints about fishy bacon, and this he considered was due to feeding on some sort of oily food, or probably molasses or treacle; the person who gets oily bacon usually describes it as fishy. This is a serious matter for curers. When they had previously been getting a quantity of objectionable pork the matter was brought before the Department, and steps were taken to put a stop to it, and since then complaints have been fewer. He thought he had been getting this bacon when there was a glut of fish. He suggested that the Department take every opportunity of warning farmers against the use of undesirable food stuffs, and to feed with a view to securing good quality. He did not think grams were too much fed in the district.

He agreed that the charge for portage was a grievance, but it is an old custom. It would mean that the curer would have to give a lower price to compensate for the extra carriage, and it might be as wise for the seller to leave this matter as it is.

Mr. WM. BUCHANAN, of Buchanan Bros., Ltd.,  
Bacon Curers, Londonderry.

Concurred generally with evidence given by previous witnesses. The decrease in 1913 he attributed simply to the fact that farmers in the previous year believed that potatoes would be too scarce for pig feeding—a matter in which they miscalculated; that some were killed off, and young pigs were short for a couple of years. He believed that pig numbers in the district had now returned to normal, but prevailing high prices of potatoes and feeding stuffs would probably mean a repetition of the experience of 1913, though this had not yet been made apparent to him in the markets. Nevertheless, he held the view that the prospects for pig raising are satisfactory and that farmers would be well advised to increase their stock. The outlook for Irish bacon is good, and a fall in the prices unlikely; on the contrary he thought the tendency would be upwards. Whilst he agreed that farmers could safely be urged to increase their stocks, and that every means, such as leaflets, posters, and notices in the press, should

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*Mr. Wm. Buchanan—continued.*

be availed of to make these facts known, it should be on the understanding that the Department took the responsibility for what eventually happened, as it would be a bad business for the curers if they recommended this and the prices went down. A gradual increase in the number of pigs would not interfere with the price except in so far as it would be counterbalanced by the Danish imports. A regular and increasing supply certainly would be of advantage to North of Ireland curers. It would help to maintain the trade against Denmark, and assist home curers to hold the market. His premises would allow of curing 30 or 40 per cent. more pigs.

He concurred in the statement that when a big retailer had got a quantity of Danish at the time when Irish supplies were low, the Irish merchant had to put in his bacon at a reduced price in order to regain the custom; this naturally resulted in a fluctuation in the price of Irish pork.

He agreed that big and small markets interfered with the handling of pork by the curer, and that it would be an advantage if supplies were steadier; though he did not believe it would be possible to educate farmers as to the necessity of not retaining or rushing out supplies, as they are too much inclined to suit their own convenience.

Denmark has taken up the pig business systematically, and has done and are doing well. If the Irish farmer would be likewise and not speculate as he does, and be educated to the inevitable result of the policy now being pursued, it would be to his own and the interests of the industry.

The industry is dependent on the small holders, and they should be provided with good pig sties, especially in connection with Rural District Council cottages. Influence should be brought to bear upon the Councils to make provision for these.

From his experience he did not think that the charge in respect of postage caused any friction. It is calculated to cover the cost of bringing pork from the different markets to the curing centre. It is so only in Derry. He agreed that it was mainly intended to equalise prices all round.

He did not think it possible for the curer to grade the carcasses more than he was doing. The buyer grades as well as he can in the market, but he may often not see inferior pork and pay top price for it. It might be advantageous to the buyer if all the stuff were taken out of the cart so that he could see it.

He had come across pigs from districts around the coast the bacon from which was objectionable. Complaints had, however, been less frequent of late. If pigs were fed upon cod liver oil, it would result in lowering the reputation of Irish bacon and be disastrous to the trade.

*Mr. Alexander Hamilton, J.P.—continued.*

potato crop, therefore, has a considerable influence. The price of meal is another factor—if cheap, pigs will be fed practically irrespective of the price of pork.

It would go a long way towards getting over the difficulty of increased cost of fuel for preparing food for pigs if it could be shown that equally good results are obtainable from the use of raw food. The County Instructor had been conducting experiments in this connection, and he had the Instructor's notes on the results. Thirteen feeding experiments were carried out, dealing with 84 pigs, in various parts of the county, with the object of comparing the relative values of (a) barley and Indian meal; (b) meal and potatoes v. meal alone; (c) raw and cooked food.

(a) In two experiments with 16 pigs the results were in favour of the Indian meal lot, and showed that this food was worth 10s. 6d. more per ton than barley meal for pig feeding. Taking the foods at the following prices—Indian meal, 3s. 6d.; potatoes, 1s. 6d.; linseed, 10s. 6d.; oatmeal, 12s. 6d. per cwt.; and buttermilk, 1d. per gallon—the cost of producing 1 cwt. live weight of pork with both barley meal and Indian meal worked out at 23s. 6d. for the meal alone.

(b) Three experiments with 20 pigs. The result was slightly in favour of the lot fed on meal alone. The mixture of the latter consisted of Indian meal and pollard, gradually changing to nearly pure Indian meal, each pound of meal being fed on the basis of four pounds of potatoes.

(c) Five tests with 32 pigs, fed on potatoes, meal, and milk, both lots receiving equal quantities, except that in one case the meal was given raw. The pigs were ten to twelve weeks old at the start. From the results it was evident that the daily gain in live weight was greater, and the proportion of dead to live weight higher, when the food was given raw. It was also shown that raw food can be fed to pigs after weaning, say at eleven or twelve weeks old; that they eat up the food better, keep healthier, and require less labor and cleaning than when fed on cooked foods.

The details of the experiments are published in the annual reports of the County Committee. The results of similar experiments with cattle showed that they put on only half the amount of flesh for the same amount of feed given in pigs. These facts, if generally known, should have an influence on the number of pigs fed. If it could be demonstrated that raw potatoes could be profitably used, it would be a further advantage. Any sort of fuel is at present expensive, and is an important factor. He considered that it would be desirable for the Instructor to carry out an experiment on the use of raw v. cooked potatoes. In his opinion the best method of educating farmers in these matters would be by means of local experiments and demonstrations. The results could then be published in leaflet form. He had been under the impression that the results of similar experiments were published in the Department's *Journal* only, a publication which does not come within the reach of the ordinary farmer. He was now informed that they are also embodied in the Department's leaflets. In the latter form they should be circulated widely in the county; they could be distributed through the County Secretary, holders of premium hares, and the bacon curers.

Farmers have a certain amount of grievance as regards fluctuations in the price of pork. The same thing happens in the potato market. The small market means a higher price, and on a heavy market following the price is down. Under normal conditions he himself considered that this was but natural and was regulated by supply and demand. He did not believe that there is any ring or combination amongst the curers, nor would he say that the price always comes down on a big market, but that is the general impression.

The return from cattle is much more satisfactory than formerly, and the laborer has less objection to this work. If pigs could be raised on raw food and kept under proper conditions, there might be

Mr. ALEXANDER HAMILTON, J.P., Whitehouse, Ballymagroarty, Londonderry.

Mr. Hamilton, a farmer and breeder and feeder, representing Londonderry Co. Committee of Agriculture, said that he desired to put forward not only his own views but those of the County Committee so far as he had been able to ascertain them.

He considered that pig feeding generally had declined, especially among large farmers, and that this was attributable to the great increase in the cost of labour, the objection of many labourers to attend pigs, enhanced price of food stuffs and fuel, and to fluctuations in the price of pork.

Both male and female labour generally throughout the country is scarcer and less efficient, and pig-feeding is distasteful, as it is a dirtier business than the feeding of cattle. There may be something in the fact that pig premises are not kept so well as they might be. Sunday work is also objected to.

When potatoes are selling at a high price they are disposed of, and when low fed to pigs. The

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Mr. Alexander Hamilton, J.P.—continued.

Mr. William J. McClelland—continued.

be the same objection to pig feeding. Lately profits from poultry have also caused a greater interest to be taken in this industry; a number of people are now turning from pigs to poultry, which appeal more to the women of the house.

So far as he could ascertain, the Large White Ulster is the most popular breed; it also meets the requirements of the curers, as it develops a better proportion of lean meat. The County Committee are satisfied that it is the breed to which premiums should be awarded. £55 is the amount allocated for swine in Derry and provides for about thirteen premiums; out of this number probably not more than one York would be applied for. It is difficult in some years to get all the premiums taken up, but the easy terms on which boars are now given is an inducement to applicants to buy the premium animals. If the Committee thought they could obtain additional applications for boars he was sure they would be willing to allocate more money to this scheme. In parts of the county competition for the bull premiums is keen, and though bull and bear salesmen are in proportion, the lack of applications for the boars may be due to the smallness of the premium. He would favour increasing it in order to induce more people to apply, and he thought this would be the result. These who have not been in the habit of keeping boars are reluctant to do so, but the increased premium might tempt them. It would also be advantageous to have the fee raised. The majority of the members of the County Committee are more interested in cattle than in pigs, especially those from the southern part of the county. He acknowledged that a lot of money is being spent on horses, the return from which would appear to be small; and if further funds were to be allocated for swine he believed that they should be taken from the horse scheme. At any rate, he thought the bear owner should be allowed to charge a higher fee. With the premium raised to £7 10s. 6d. and £1 10s. 6d. extra in fees, the first year's return would be £2.

He could not offer any definite suggestion that would help towards the development of the industry generally. The large farmer, under present conditions, is not likely to take it up; but on the small holding, where no labour difficulty exists, more might be done. The judge under the small farm and cottage prize scheme should be allowed to give a certain number of marks for well kept and good pigpens. In his opinion, it is only with the small farmers and holders that an increased production in pigs is to be looked for. The Rural District Councils should be urged to provide an up-to-date piggy with each cottage, which perhaps could be done for £5 or £3 extra; this would be an inducement to the occupier of the cottage to keep pigs. So far as he knew, no such useful adjunct is now provided in connection with any of the Councils' cottages.

Mr. WM. J. McCLELLAND, Blackpark House, Drumcanny, Omagh.

Mr. McClelland, representing Tyrone Co. Committee of Agriculture, stated he was a farmer and breeder and feeder, and keeps an average of about 10 pigs. He agreed that in 1912 the potato crop had been a comparative failure and made prices higher; this limited the demand for suckers and induced breeders to kill off sows, with the result that a shrinkage became apparent in 1913. The price for pork had also been low in the previous year.

He considered that pig feeding is carried on to about the same extent as formerly, but the advanced prices of all feeding stuffs and the sudden fluctuations in the price of pork will result in another shortage. These factors, as well as the supply of potatoes, affect the number of pigs fed by farmers to the extent of about 25 per cent.

60s. 6d. is a good price for pork, but he did not think it would pay to feed meal at £5 10s. 6d. The

price now for a good ten or eleven weeks old sucker is £3, and he was getting this figure for pigs for which he had formerly been receiving 50s. 6d. His trouble is to get feeding stuffs to fatten the pigs instead of selling them. He agreed that it would pay him if he could make them 12 or 13 stone each in four months at a cost of 50s. 6d. He would be more interested in the feeding if he could hope for a good price. He would be glad to feed the pigs if it could be shown to him that the business would be profitable on the basis of prevailing prices, but he thought it would pay him better to give the feeding to calves. He had experience of both cattle and pigs, and had a fair idea of when each paid.

It is customary to cook all the food, and it would certainly lessen the difficulty as regards labour and fuel if it could be fed raw. Local experiments in this connection would command the confidence of farmers better than any conducted at a central station. The experiments conducted by the County Committee had been slightly in favour of raw food; the addition of a larger quantity of milk with the raw food gave a more satisfactory return; milk gave a good return when fed to pigs. The results of the experiments were published in the Committee's annual reports.

The large farmer cannot give attention to pigs. The small holder has his own and the labour of his family to depend upon, and is not affected in the same way. Labourers formerly kept pigs, but they now go on more for poultry instead, with which they have less trouble. The labourer cannot always afford to pay more than £1 for suckers.

Pigs could be fed cheaply in the towns on offal from hotels, etc., but the sanitary regulations do not allow of the industry being carried on in urban areas. He agreed, of course, that these regulations are necessary.

All the premiums in Tyrone are given to the White Ulster breed, and the people are satisfied with it. He did not think the York pigs could be profitably disposed of in the county. Those who sell suckers want soft, light haired pigs with good deep sides and drooping ears; it is not considered that the York meets these requirements. There are five or six applicants for every premium, and the difficulty is to prevent people from canvassing members of the Committee for boars. The standard of the premium animal is fairly high, but he thought it would be advantageous to increase the second year premium, and that a higher figure all round should be given, as it would induce applicants to look for a better class of boar. This would be his only object in raising the premium. The higher the standard the better. Many people object to having a boar about the place; it causes a good deal of trouble, and £3 seems a small amount. Young boars are frequently bought and kept on until fit for work. A ten weeks old animal selected out of a litter with the prospect of passing for a premium would cost about £3. It would be desirable to have more premiums. The amount given to bulls and boars is perhaps better spent than that set aside for hares.

He recognised that raising the fee would have the same effect as increasing the value of the premium; the only drawback is that if the fee for an ordinary boar were lower the sow might be sent to it. The main consideration with sow owners is to send the animal to the nearest boar irrespective of price. The same applies to cattle, etc. It is not always realised that the good sire leaves better progeny.

He considered that the breeder who receives £5 for boars selected for premiums is better paid than if he turned the animals into pork. At the time of year they are inspected the Department do not get the good pigs. If the breeder got, say, £6, he would be inclined to keep for the Department boars farrowed in July and August instead of in September and October. His experience as a breeder is that the farmer would be better; the weather is then warmer and more milk is available to rear them well. Of course, the premium animals have to be sent out



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during the breeding season. He found it possible to keep a number of boars together up to about five months old, and £5 represents a fair return at that age, as boar pigs have not to be maintained so far as it is intended for pork. The ordinary breeder is generally able to use his judgment as to the animals that he will keep as boars, and he agreed that few of those retained for any length of time are finally rejected. The breeder endeavours to obtain the opinion of the inspector as soon as possible as to whether it is advisable to keep the young pigs as boars. He knew that if the selection were more stringent a bigger proportion of them would be left on the breeders' hands, and that the price now given would not then be so satisfactory; but if the standard were raised the breeder would keep only very good animals, and in this way an improved class would be obtained. The number of those who breed White Uster pigs for premiums is limited. A larger number would mean a better selection. It would be a decided encouragement in this direction, and as a breeder he would be glad to see it. This sum would enable him to bring in fresh blood, which is very necessary at present.

Mr. JOSEPH McARTHUR, Camasaddy, Bart.  
Londonderry.

Mr. McArthur, representing Donegal Co. Committee of Agriculture, stated he was a farmer and breeder and feeder of pigs. The shrinkage in pigs in Donegal in 1913 he attributed to the deficiency in the potato crop of the previous year; pork came down, the price of purchased feeding was high, and young pigs could not be sold, so that good sows were slaughtered for five or six months following October, 1912, and this resulted in a shortage of pigs in 1913. When conditions improved later, pigs returned to the normal number.

A plentiful supply of potatoes has a wonderful effect on pig feeding. Indian meal is now higher than it has been for a long time, and this is also bound to influence pig feeding. What the potato crop affects the labourer closely, the present high cost of feeding stuffs is likely to cause many people to go out of the industry. Some of the small holders may reduce the number of their sows, but he did not think they would get out of them altogether. In his opinion the results were not likely to be so serious as in 1913, owing to the prevailing better price for pork and the more satisfactory outlook for the trade.

He did not consider that pig feeding is carried on so extensively in the district as in former years. The reasons he ascribed for this are the difficulty of obtaining labour and preparation of the food. These factors influenced the larger farmers principally. He agreed that the industry is mainly confined to small holders, and that the labour difficulty does not affect them, as they do the work themselves. Labourers and small farmers go in for feeding one or two pigs each year.

The cost of fuel and labour in preparing food would be largely obviated by the use of raw feeding, but he did not think it could be given until the pigs were four or five months old. From what he had seen, he thought it would be injurious to young pigs to give them raw Indian meal. The labour question, however, is such a big factor that the larger farmers, even if the use of raw food could be shown to be practicable, would not be inclined to go in for pig feeding.

He had been keeping sows for forty years. He began with a cross from an Irish sow and a belted pig which came from Linnet, and it did well. He next had the small York; this went on fairly well while he had the Irish sow, but the breed ran out in ten years. He then had the Large York, but the pork did not take so well in the local market, as the hams were large and the sides not so good for roiling. The roll sold better than the ham. He had

Mr. Joseph McArthur—continued.

a Large Black for some time, but could not get a satisfactory price for the pork. He now had the White Uster, and he thought there were no better pigs for local requirements.

It would help to keep up and improve the breed of the White Uster if the Department would distribute young sows from their farm at Glasmere or elsewhere through the County Committees in the same way as boars.

There had been difficulty in getting all the premium boars located, but it is now possible, though with some difficulty, to get the number taken up. The keeping of boars is regarded as a disagreeable business. The ordinary fee is 2s. 6d., and if the charge for the premium animal were raised it might not get the preference of the sows. Many farmers are not yet educated to the advantage of a good sire. Provided that the fee for non-premium boars is at least 2s. 6d., he would, however, favour an increase in the fee as well as in the premium in both years, raising it to £5 in the second; the boar has to be kept a long time after the season is finished. It is usual in Donegal to retain boars for the two years, and he did not think this resulted in inbreeding, as the animal would in the second year be too heavy for young sows. He was aware that the Department placed out a number of boars in the Conspicuous Districts independently of the Committee, and that between the two bodies the county was fairly well covered. With the exception of Inishowen, pigs are not kept in the poorer parts of Donegal, as the land is not capable of producing any quantity of potatoes. In the circumstances, he did not consider it necessary that the County Committee should set aside more funds for the swine scheme. He personally would be inclined to take some of the money from horses, from which there is a poor return.

Mr. ALEXANDER WILSON, Deerpark, Newtownstewart.

Mr. Wilson, a farmer and breeder and feeder of pigs, stated his stock varied from 100 to 160 pigs, all of which he bred.

He agreed that the shrinkage in 1913 was due to the low price of pork in the end of 1911 and beginning of 1912, that young pigs were making a poor price and sows were sold off; meal was dearer than in the following year. In his own district, however, the potato crop would have been the principal difficulty. A good price was anticipated for the 1912 potato crop, and sows were disposed of. Farmers did not appreciate the advantage of using Indian meal when at a low price; the feeder in his district is inclined to look at the price for potatoes only. He considered that farmers did wrong in killing off sows on account of the anticipated higher return for potatoes. He had no hesitation in saying that the man who kept steadily at the business made money out of it. The speculative farmer would eventually come to grief. It is a great mistake to run in and out of any business, especially pigs. Nothing else goes up and down in the same way.

He admitted that the fluctuations in supplies placed the bacon curer in an awkward position as regards the maintenance of his market. On this account he thought the agricultural community were to blame for not keeping supplies more uniform. Of course, it is obvious that the odd man who remains in the business reaps the benefit of exceptional prices. With this view, his own policy had been to increase his stock when others were getting out of them.

He would not be surprised to learn that several people were at present killing off breeding stocks owing to the high cost of feeding; and to a certain extent he expected that the experience of 1913 would be repeated. He agreed that the number of pigs can be raised or lowered more rapidly than any other stock. In his district the people work more evenly in cattle or sheep than they do in pigs.

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Mr. Alexander Wilson—continued.

The number of pigs now bred in the district would appear to be normal; the shortage from 1913 had been filled up. His market seemed to be well supplied both with suckers and pork. Cottagers, however, are less inclined to continue the industry, they may consider that poultry pays better; this industry appears more to the women folk.

A co-operative creamery is working in the district, and he thought this should help to increase the number of pigs. The separated milk is taken back by suppliers. Every supplier endeavours to use all he takes home. After three or four weeks on whole milk, he gave separated milk to calves. He liked to have milk for pig feeding, and he used a good quantity of separated milk for this purpose. In 1912, as an experiment, he gave double the quantity of milk, but the return in pork after a certain quantity of milk did not compensate for the extra amount given.

The White Ulster is the type usually kept, and he considered that it should make good bacon; but a cross would probably leave the farmer a more satisfactory pig. The cross with the large York might be the best; but any cross, even from a good nondescript animal, is an advantage. He did not think the Ulster matures quick enough. He had turned out an occasional pig over 2 cwt in six months, but this would be an exception. The small holder should be able to fatten better and quicker than the larger farmer. If the pig matures quickly, it can be finished at 1½ cwt.; others are inclined to go over 2 cwt. before being fat. He preferred a ridge killing pig from 1½ upwards, and provided he got the right type, he did not mind how it was bred. While the White Ulster is preferred in the district, his own opinion is that the York is just as good; it is not sufficiently appreciated, the people appear to be looking for pigs possessing certain small characteristics which are not of very much importance. From the description he had heard of the White Ulster type, he considered this was the animal wanted.

His markets are Newtownswewart and Strabane. He had no complaints as regards the buying. The buyer simply runs round and marks the pigs, which are taken automatically at the top price merchants are paying. Sellers often do not know what they are getting until the market is over. Practically speaking, no difference is made in the price for quality; in this way the seller often comes out well for coarse quality pork. When a man stands over his pork he may obtain a slight amount over or under the price, according to the quality. He frequently sends pork to the market, and just accepts the price prevailing on the assumption that it is the top; at other times he delivers the pork direct to the owner. He was usually able to obtain the highest figure paid in the market. Newtownswewart is a small market; buying or selling is free and easy, and the higher prices do not always prevail. In Strabane or Omagh the business is all done at once after the ringing of the bell.

The fluctuations in price would usually not exceed 2s. 6d. from one week to another. He did not think this was an undue amount, but he could not understand it when occurring in the course of a couple of days. It is well known that prices will be reduced on a big market. If the people believed that the price would be maintained at a level figure, they would send out the pigs with greater regularity. He quite agreed that the supplies of foreign pork must influence prices here at times, but he objected to the variations occurring so frequently and closely. Neither should the fact of a few extra pigs in one market alter the price. He considered that the adoption of co-operative methods would probably improve the market.

Small farmers make the most out of pigs, but have not always proper housing accommodation. Leases similar to those made by the Board of Works for hay sheds should be given for the erection of pig houses. Some such help should be available for all classes of holders. The man with a 20-acre farm should be able to keep at least two breeding sows;

Mr. Alexander Wilson—continued.

and if all the progeny are fed, a fair amount of housing would be required. Provided that the work is done by the farmer, he agreed that 25s. or even somewhat more, should constitute the minimum loan; this might be extended to 250, according to the size of the holding. The provision of suitable buildings might induce some of the larger farmers to go in for pigs. In the case of all these loans some arrangement should be made for the purpose of eliminating a great deal of the red tape and routine required before the loan is granted.

Mr. WM. J. McILROY, Rossmore, Londonderry.

Mr. McIlroy, a farmer and breeder and feeder of pigs, representing North-west Agricultural Society, stated that at a meeting of the Society held on the previous day he had been asked to give evidence. In his view the shortage in 1913 was largely explained by the potato crop of 1912. The crop in a good many places was practically ruined, and in some cases the potatoes could not be dug out. This had the effect of debasing the pig feeding industry, and stocks were reduced to half. The number of sows was either reduced or they were sold off altogether. Men who had been in the habit of sending three or four sows to his farm sent perhaps one or two, and others cleared out the stock entirely. There was consequently an enhanced price for any class of pig or pork in 1913.

At the present time he did not consider that there was any shortage in the number of pigs bred and fattened in the district. The supply, so far as it leaves a remunerative return, is equal to the demand. He believed that had it not been that America had no surplus supply to dump on British markets, existing prices could not be maintained. While those countries remain an open market for the surplus production of other nations, pig breeding cannot be conducted on a satisfactory basis. The cattle reared in Denmark are maintained solely with a view to the production of milk, and the only outlet for separated milk is pigs. It is but reasonable to assume, therefore, that Denmark will make every endeavour to capture British markets; their conditions do not permit of cattle raising, while farmers in this country can have calves as well as pigs to utilise separated milk.

He did not think pigs were kept in the district to the same extent as formerly. There is not a farmyard in the neighbourhood, whether in use or lying idle, that has not got a number of pigsties which were in occupation at one time. Nearly all the farms are now let on the concrete system; the grain crops are taken off and for the most part shipped across channel, and any portion of the root crops not used by dairymen are also marketed. The probability is that were these holdings occupied as formerly a good number of pigs would still be raised on them. Whenever possible the farmers are going in for cattle and sheep, mainly on account of the labour difficulty. Pigs are kept both by large and small holders; the latter, of course, are not subject to this difficulty in the same degree. Not only a great number of hired help, but the sons and daughters of farmers, have emigrated, and this accentuates the difficulty of obtaining labour.

In close proximity to cities or towns it hardly pays to give any milk to pigs owing to the high price that can be obtained for it otherwise. Further out, and in the creamery districts, buttermilk and skim-milk are, however, available for pigs. He would himself certainly use it for this purpose.

A rise in the price of potatoes at any time has a deterrent effect, especially as regards young pigs, which can now be bought for less than 20s. 6d., as compared with 30s. 6d. to 40s. 6d. some time ago. In ordinary cases the price of pork is not a factor, but rather that of potatoes and Indian meal. People do not look sufficiently ahead in these matters. With pork at 56s. 6d. to 60s. 6d., it would not be

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Mr. William J. McElroy—continued.

profitable to use Indian meal at current prices. When Indian meal was cheap some years ago, a number of the larger farmers converted to the town bought in strong store or slip pigs, and finished them on Indian meal alone; but that line of feeding has not been practicable in recent years; not only has the price of pork gone up, but also that of bone-meal. The experiment in question was a pure speculation, but those who carried it out had before them the prices of meal and the return in pork; they would have done better had they varied the feeding. This business might have been carried on with good results in 1913 and 1914.

The current price of pork is the vital matter. The fluctuations are very annoying. He did not understand why the price should rise and fall to the extent of 4s. 6d. to 5s. 6d. in the week. When it falls the buyers say the demand has fallen off; while if it is rising, the retailer of bacon soon knows of it. He disagreed with the previous witness, who said the retailer does not put up the price when pork rises. The shopkeeper raises the price of any other commodity immediately, and he did not see why the same should not be done with bacon. He had known pork to fall 10s. 6d. before the merchant attempted to reduce it to the shopkeeper.

A person in the locality who keeps over three hundred pigs all the year round sent his pork into Derry every week, but now ships all the pigs alive. He got such bad treatment from the Derry cures that he would not continue giving them any more pigs.

The seller never knows the weight required by the curer. When weight can easily be put on in winter a light carcass is wanted, and in the summer any heavy pig is taken. He agreed that the requirements of the curer corresponded for the same period each year. His own view would be to make the pig heavy, as after coming to a certain weight he believed that the pig will put on more flesh daily. In his opinion the pig should not be killed until it had reached 14 cwt. He considered that it paid him better to feed to a heavy weight, though he had to accept a reduced rate. He would not blame the curer for cutting the price if the pig were too heavy.

Although the curing facilities in both places are equal, the Derry price is usually lower than that of Belfast. Cookstown and Strabane are generally a little higher than Derry, but still under Belfast.

The person who sends to the bear a sow of an inferior sort, or for the reason that it is not likely to make good pork, blames everyone but himself when he has a poor litter or if the pigs do not thrive. The Department should warn farmers against this practice, and urge them to breed from good sows only. Some of the sows that come to his bear are practically worthless for breeding, and he does what he can to prevent farmers using such animals for this purpose. If it were decided to henceforth for public service, it would only get over half the difficulty if some arrangement were not also made to select the sows.

He favoured the White Ulster, but though an improvement is observable, there is less objection on the part of cures and breeders to a little hair. Very thin skinned pigs are usually fatter, and the Ulster is fatter than the York fed on an equal quantity of food. His view is that a cross between the York and the Ulster would be the most suitable for all concerned: a large York bear with an Ulster sow; this would take away the appearance that many people object to in the sharpness of the ears. It is in the people's eyes only that the ears are an objection. He had fed pure-bred Large Yorks against pure-bred Ulsters, and the York pig always had the advantage in the feeding. He bred the Ulster to please his customers and the York to please himself. Owing to the small demand he retained a limited number of Yorks only; he kept ten sows altogether, two of which were pure-bred Yorks, four pure-bred Ulsters, and the others half and half. The Ulster sow has a fat temper, and is likely to overlay the bone-meal. This does not occur with the York; the latter, for this reason, rear more from a Fitter. He believed that the Ulster had improved of late years

to the extent that the skin is not so fine and that it has more hair. The breed could be still further improved, but this would be in the direction of the York type. He was aware that his views as regards the two breeds differed from those of most people in the North, but he would point out that the Ulster type is largely derived from the York.

Mr. W. J. W. OSBORNE, Camper, Londonderry.

Mr. Osborne, representing North-west Agricultural Society, stated he was a farmer and breeder and feeder of pigs. The drop in the price of pork, in November, 1911, and the better returns for home grown feeding stuffs in 1912, were, he thought, responsible for the shortage of pigs in the following year. Owing to the decrease of feeding in 1911, a number of sows were killed off, and for a similar reason there would be a strong temptation to kill off pigs now, though he himself would not do so.

In July, 1913, he marketed a pig weighing 3 cwt. and another of the same weight in May, 1914, without suffering any cut in the price. This season, however, anything over 2 cwt. is cut. He would like to see a better outlet for heavy weight pigs to enable the full price to be obtained all the time.

He had noticed some very inferior sows coming to his bear. These were absolutely unsuitable for breeding, and were usually animals that could not be fattened, but were sent to the bear so that better prices might be obtained for them as breeding stock than could be got for them as pork. Unfortunately the bear owner is not in a position to refuse his bear to such sows. Pigs from these inferior sows will not fatten, and the feeder who gets them are discouraged. If people were sure that the pigs they get would thrive, they would be more inclined to feed. A large percentage will not do so, and one or two unthrifty pigs run away with the profit. In some cases, owing to outbreaks of "Diamond" and other diseases, pigs do not thrive, and are given up altogether.

The cures make very little objection to any breed of pig except as regards hair. The Black was condemned on account of the colour of the hair.

He could not understand why 1s. per cwt. more was paid regularly in Derry by Belfast cures than by Derry cures; and why an extra 1s. per cwt. or more is given for pigs in Limerick, an inland town, as compared with Derry, a port, and a pork curing centre. There was nothing to cause any difference in the quality. Extra freights and extra expenses should have the opposite effect.

Sellers often do not stand the market, and the price is left to the representatives of the cures, in whom there is a reasonable amount of confidence. These men understand their business well, but he thought some person should be appointed by a competent authority to see fair play all round. Pork fluctuates more than any other farm commodity, and the farmer never knows what he is going to get. If the pigs were bought on foot they could be brought home if the price were unmanageable. Except for the fluctuations, however, the people appear to be satisfied with the present system: the farmer likes to have the killing done at home, and it preserves a local industry.

He was acquainted with the history of the curing establishments in Derry. He did not know any other business that appeared to have made so much money, and he considered that they could have attained to their present position only at the expense of the farmer; the merchants are able to keep their prices steady. He admitted that the capital required to equip a big bacon factory was considerable, and that the cures should have some return for this outlay.

Mr. J. MARK, of Messrs. Mark, Boulton, and McLaughlin, Bacon Cures, Londonderry.

Stated he finds the best pork to be that fed by the small producer; that turned out by the large

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Mr. J. Mark—continued.

Mr. J. Mark—continued.

farmer in large quantities is not so good. A fair number of pigs are fed in the City of Derry, but not so many as formerly. These are not so satisfactory as the country fed animals, and are usually shipped as fresh pork or sold otherwise than the ordinary stuff.

The districts in which the Ulster is the predominant breed supply him with the best class of pig. With the exception of the east, the Ulster may be said to be the Large York, and he had known many pure bred Large Yorks to be sold as Large Ulsters; they had drooping ears. He was quite satisfied that they were not Middle Yorks.

The curer does not want too fine skinned animals for the reason that in the summer months the skin is liable to be injured. He would just as soon have a little hair both in summer and winter. He was aware of and could appreciate the objections of the southern curers to the Ulster breed.

It would be an advantage to curers if they could get a better average supply of pork. Irregular supplies upset the curer's market, and this must naturally be reflected in the price paid for pigs. When the curer gets more than the average, he often has to accept a ridiculously low price to get rid of the perishable fresh meats, such as fillets, kidney, etc. If even part of the offal goes to waste, it means losing the profit on a pig. The remedy would appear to be to induce farmers to market the pigs more regularly, and in any case not to send in too big a lot on a falling market.

When pigs are not paying, rearing is stopped and the average supply also ceases. In the summer he would not take pigs from a long distance, as the meat would not be in a satisfactory condition. The curer must accept much less for a heavy bacon, and he must consequently cut the price of the pork. Very often the curer has to take out from the hams of heavy pigs a considerable quantity of fat, which is sold at a great loss.

His rolls, etc., must be graded, and the price for each grade is separate. The heavy side is not so valuable as the light one. It is not that heavy pork commands the highest price in summer, but it is scarcer then and a better price can be obtained for it. The best pig at the best price always pays the curer.

The large feeder referred to by a previous witness could not be regarded as a man who could obtain better returns on the other side. This feeder had been in the habit of sending half the pigs to his firm and the remainder to another curer. The stuff, when shipped to a big customer in England was reported as unsatisfactory as to quality; the feeder was told of this, and eventually his firm refused to take any more. The pork was then brought to another curer, and the same thing happened. There was no alternative, therefore, for the feeder but to send the pigs to the other side as pork.

## TWENTY-SECOND PUBLIC SITTING.

FRIDAY, 15TH JANUARY, 1915.

AT 10 O'CLOCK, A.M.

At the Courthouse, Enniskillen.

### PRESENT:

Mr. JAMES B. GORDON, B.Sc. (Chairman).  
Mr. R. N. BURN.  
Mr. STEPHEN O'MARA.

Mr. PATRICK CLARKE.  
Mr. J. WILLINGTON, J.P.  
Mr. O. W. H. ROULESON, F.R.C.

Mr. W. R. WHITE, Manager, Scottish Co-operative Wholesale Society, Ltd., Enniskillen.

Mr. W. R. White—continued.

Stated that the Society is an incorporated concern having its head office in Glasgow. The Enniskillen branch had been established for about 30 years and its object is to procure supplies of produce for the benefit of the co-operative movement on the other side. Managed from this branch are creameries, a depot for the collection of eggs, a bacon curing factory, and in connection with the latter a piggery.

Taking the country as a whole 1911 showed an increase from the previous year. He believed that the restrictions following on the outbreak of Foot and Mouth disease in 1912 were the first cause of the shortage in pig numbers in the district in the following year. He did not think that the restrictions of 1913 affected the number in 1914. Up to July 1912, when the outbreak of Foot and Mouth disease occurred, suckers were at a moderate price and were being bought freely, and the markets were fairly well supplied with pigs, but in the scheduled area, which was fairly large, the restrictions were such that breeding animals had to be killed off as they could not be moved from the farm otherwise than dead, and he had seen at some of the Enniskillen markets 30 or 40 sows exposed for sale, an experience he never previously had. In consequence pigs became scarce later. Live pigs could

not be shipped, and heavy animals had to be slaughtered and sent to southern curers at a small price. He agreed that the price of pork was low and meat comparatively high in the end of 1911 and beginning of 1912, and that the price of potatoes in the latter year would also be a factor.

He would not like to say that pigs are kept mainly by the small holders; many cottagers are more inclined to keep fowl; the pigs are principally raised by farmers of from 5 to 20 acres, and these rely on their own labour. Outside labour could not be depended upon owing to its higher cost and the drain from emigration.

Pig raising is not carried on so extensively as formerly, and in his opinion it was not likely to be, owing to the labour difficulty and the comparative prices of feeding stuffs and pork. The farmer only wants what will pay, and if pigs are not profitable he will turn to another industry. He would be glad to have an increased supply, but he did not see any prospect of this in the near future owing to the lower price of pork and enhanced cost of feeding. At present prices the farmer would not have a profit.

The potato crop has a strong influence on the number. With a plentiful and cheap supply pigs will be fed extensively to a certain extent regardless of the

ENNISKILLEN, 15th January, 1915.

Mr. W. E. Whyte—continued.

Mr. W. E. Whyte—continued.

price of pork. Potatoes and Indian meal are the chief feeding. A considerable quantity of potatoes is grown in the Mourne Valley.

Farmers would not rear pigs if they find it more profitable to raise cattle or even poultry. A good demand always exists for eggs, and many small holders are keeping fowl in preference to pigs. He dealt with a radius of about 25 miles and the figures paid by him for eggs were:—

1912	273,671	163,888	Large hundreds (120).
1913	484,450	193,450	do.
1914	—	297,504	do.

This showed that more poultry are kept in the district and it had the effect of reducing the number of pigs.

Irish bacon, including that from the north, competes with Danish and American, but the latter is not now an important factor owing to its high price; it had more influence when cheaper. The quantity of American imported is considerably less than formerly, and is decreasing; but according to the reports and statistics he had seen, the prospects for it this year are better. He agreed that in a few years America would eventually consume all its own bacon, and this would leave an opening for other countries. In the ordinary way this trade would be captured by the Danes. Some of it should be taken by Ireland, but whether this could be done depended on the Irish farmer finding the business profitable. He could not offer any opinion as to why American was selling dearer than Irish bacon in the beginning of 1914. Irish bacon competes with Danish, and Sany Danish or American imports bring down the price; the Irish supply is a secondary consideration. The Continental supplies on British markets regulate the price, and this is reflected on home pigs. If Danish imports are normal, a rapid increase or decrease in Ireland would interfere with the price; but a gradual increase would probably not have the same effect. Although Irish bacon holds a good position for quality the tendency is to use other hams when cheaper.

The bacon cured by his Society is sold through their local bodies all over the country, but the latter are free to take any cheaper stuff. Enniskillen is a self-supporting branch and the curing factory worked as if an independent establishment, but the London prices affect him directly, though he was not acquainted with the conditions in that market. He had no means of knowing the price he would receive for the bacon and he was governed by the prevailing quotations. The fluctuations on the English and Scottish markets are just as great as the price of pigs or pork in this country. The size of a particular market only occasionally affects the price, but when more pigs are marketed than buyers can handle the price will give way a little. From his experience of the trade there could not be any combination or collusion amongst buyers as to the price. His prices for pork for the whole year were, approximately:—

1910	...	...	...	58/8
1911	...	...	...	56/6
1912	...	...	...	54/1
1913	...	...	...	62/6
1914	...	...	...	59/-

The 1913 figure was due to the shortage of pigs in this country. He was not aware of a shrinkage in Denmark, but there was in America.

Although his premises were dealing with the nearest that their capacity permitted, he was not at the limit of his trade. He had the market and if he could rely on more pigs he would be prepared to provide the necessary facilities.

He had no complaints as regards the quality of the pigs he was receiving. He considered the White Ulster to be quite suitable, or preferably a cross between the Large York and the Ulster. He considered that it would not be pedantic to raise the fee for premium hams.

He had no slaughterhouse. Most of the pigs were killed by the farmers before being sent in. Any that he bought alive were slaughtered in the public abattoir in the town.

The present system of marketing pigs by dead weight he did not consider to be the best. He preferred the Danish method of bringing the pig to the factory, where a weekly price is fixed according to weight and quality, and this avoided some of the fluctuations and prevented a lot of talk about conditions amongst owners, etc. The farmer knows the price for the week and can arrange for the killing accordingly. About three years ago an attempt was made to establish a fair for live pigs in Enniskillen in conjunction with the dead market, but the project lasted a couple of months only. Year by year the system of marketing pigs dead is extending westwards. If more than the ordinary supplies are brought into Great Britain they cannot be put into cold storage like beef or mutton, as the meat would not be satisfactory when it comes out; when bacon is cured, the cold storage gives it a bad flavour and sour taste, so that it can only be disposed of at a lower price.

He had accommodation in the pigery for 800 animals and fed from 400 to 500 number. All the feeding was purchased, and included potatoes, Indian meal and bone. He had no separated milk as it all went back to the suppliers. His experience showed that, at present, pig feeding was not profitable if suckers were bought at 4s. He kept no record of the quantity of feeding required to produce a definite amount of pork. With the price of suckers down to 4s it might, however, leave a profit.

Some years ago he tried breeding and feeding pigs, but found it desirable to give the business up owing to trouble with the young pigs. He now preferred to buy in stores. He calculated that the cost of maintaining a pig would be 3s. to 4s. per day. All the feeding was cooked, and this figure covered cost of labour, etc. It would readily make 1 lb. daily. He had not tried any formal experiment with raw feeding, but his experience led him to regard cooked food as more satisfactory.

From the Society's premises in this country all the separated milk is taken back by the suppliers; this is also done in connection with a number of other creameries in the county, and the milk is usually given to pigs.

He was aware that this was the practice adopted in Denmark. He was personally acquainted with the two countries and the system both in Ireland and Denmark in this respect is the same. The Danes, however, keep five pigs where one is kept in Ireland.

The prevailing price of pork in Enniskillen is 60/-, but owing to the high cost of feeding, farmers will not buy suckers. This was not a potato growing district, and possibly no home grown feeding is available. In Clones on the previous day he had seen upwards of 100 pigs from 40 to 60 lb. weight killed for the London market, where they realised about 6d. per lb., because they could not be sold for fattening. Some might be sent alive. Suckling pigs that twelve months ago were 4s. are selling at 12/6 to 15/-. Farmers are discouraged from keeping sows, and during the past three weeks a number had been sold off. Suckers are usually sold at about eight weeks old. At this time of year particularly a large percentage of them go wrong from six weeks old; he could not say but that the breed might be debilitated.

There are not so many pigs fed to the town of Enniskillen as formerly. They must be kept a certain distance from the dwellinghouse and under proper conditions as to accommodation and cleanliness, so that many people are not inclined to take up the industry.

Unless in exceptional circumstances the extreme fluctuations from market to market in the pork would be about 2/-, and the usual amount would be 1/- to 2/-.

He considered that it might be possible to put up in the market the price being given for pork, but this might not always be to the interest of the seller. Buyers are now competing against one another and often pay more than the current rate. If the local press, however, published the prices prevailing in local markets the farmer should be able to use his own judgment as regards the killing of his pigs.

About Christmas and the New Year the price falls in the markets all over the district. At this time Scottish trade is not normal and he did not want so many pigs. The fluctuations in Enniskillen are similar to the other towns. In one week there were about

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Mr. W. R. Whyte—continued.

Mr. John Hall—continued.

100 pigs and the price was high as the merchant was compelled to pay more than the proper value of the pigs in order to get his supply; in the following week the number was about 400. It does not follow, however, that the price is always down on a heavy market.

Rev. JOHN HALL, Garry Rectory, Enniskillen.

The Rev. Mr. Hall, representing Fermanagh County Committee of Agriculture, stated he agreed generally with the evidence given by the previous witnesses, but while Mr. Whyte had gone into the relative prices of pork and feeding he had not referred to the time and trouble involved. Farmers have been doing better with cattle; many of them are making more money out of young calves than they could with pigs, and the return from pork now is not equal to last year. A number of small holders are more inclined to go in for poultry and turkeys, the trade in which is considerable, and to discard pigs, a large number of which while young go wrong, for what reason he did not know, and on this account there is a big difference in the price of pigs in early summer and early winter. Approximately 1 per cent. of the pigs go wrong, and this interferes with profits. The pigs are provided with good enough housing and given exercise.

One pound would be the normal price for suckers, Indian meal at 29 10s. could be fed at a fair profit when pork is 60/- for the reason that farmers do not rely entirely upon purchased stuffs. If all the feeding had to be bought the profit would not be satisfactory. When pigs are selling well the sow will sometimes be fattened and sold when the first litter is taken off.

If farmers could be educated to the value of raw meal it would get over the labour difficulty and some of the trouble as regards feed. He knew of a case where raw feeding had been tried with considerable success. The tendency to give pigged scraps mixed with raw meal is growing amongst the better class of farmer, and the pigs do well. An extension of this system would be an incentive to pig feeding. These matters should be brought more definitely to the notice of farmers generally. He did not think that the ordinary farmer pays much attention to literature.

A limited area of potatoes only is grown, but a good crop has a material influence on the number of pigs kept. The potatoes can, however, be sold to advantage. At the present price of 4/- per cwt. it would not pay to feed them to pigs. Farmers would be much more independent of purchased foods if they raised a greater quantity of home grown produce, but he thought it would pay better to give ground oats to calves than to buy young pigs at the prices that were ruling. The fattening of cattle would hardly be feasible in Fermanagh, but the system of feeding calves adopted in the county gives a good return for home grown foods, and the work is pleasanter and easier than that pertaining to pigs; a larger quantity of manure is also available, whilst the manure from pigs cannot be left lying about in the same way as the other, as it would lose more of its fertilising constituents. Many farmers have sheds for calves in which they allow the manure to accumulate until the spring. This practice could not be adopted with pigs. If suckers, however, could be obtained at the normal figure he agreed that it would be more profitable to grow crops for pig feeding. Less labour, however, is required in connection with calves and cattle, and farmers are less inclined than formerly to engage in a more laborious occupation. The women who formerly attended largely to the pig feeding are able to turn their attention to more suitable work which pays them better.

When pigs are killed they must be sold and the farmer must take the prevailing price, and this is most erratic. It would give confidence and stability to the market if anything could be done in the way of disposing of pigs by live weight. He would prefer this system. When the fairs were in operation pigs were sold as stores if the farmers did not want to fatten them, and they could bring them home if they did not like the price. He noticed then a bigger shipping

trade. Mr. Whyte evidently obtains some of his supplies from the live markets in the west. He was aware that many of the markets in which pork is now sold were formerly live markets, but he did not think the farmer had much to do with the introduction of the dead meat system. He acknowledged that of late years the tendency is to market the pigs dead; that the pigs are also killed much younger than formerly and that this means a greater pig population in the year than appeared on paper. He was referring to northern markets only. He would say that the average life of a pig in Ulster would be six months, the aim being to finish the pigs as quickly as possible. While the statistics, therefore, indicate the number of pigs from year to year they would not show the actual number raised annually as compared with 25 years ago. The number would be greater now owing to the practice of finishing two litters in the year, while formerly the pigs were much older before being sold. The pig population should be calculated at twice what it is on a given day. At six months old the average value and weight should be about 24 lbs and 14 cwt. respectively. Mr. Whyte agreed with this calculation.

The County Committee set aside 435 for the Brixton Scheme, but this amount would, he believed, have been increased were it not for the difficulty of getting applicants for the premiums. He did not consider that the premium offered sufficient inducement to the farmer to keep a boar, and he would recommend that it be improved. He would suggest 48 for the first and 25 for the second year. The boar is a troublesome animal about the place, and some inducement should be given to the farmer to keep it. The usual fee is 2/6, and he did not think it would be any harm to raise the charge for the premium size to the same figure. The low fee, however, is looked upon as a privilege and it certainly induced farmers to send more sows to the permanent boar, as otherwise they did not have sufficient regard to the advantage of a high class sire. He did not consider that those who bought bulls could make a profit out of the premium, but, when fattened, a good price could be obtained for them as beef, while the pork price for a boar is very small.

If the amount for sows were to be increased he would take it from the allocation for horses, which he did not consider gave an adequate return. The feeling of the Committee has been to give more to pigs, but there were no applicants. He doubted whether they would agree to the fee being raised.

Mr. THOMAS CRAWFORD, Gortalsaghan, Enniskillen.

Stated he was a farmer, and breeder and feeder of pigs. He did not notice any decrease at present or in 1913. He believed that in his district the industry had been well maintained and was on the increase. He acknowledged that at the end of 1911 and commencement of 1912 suckers were cheap and sows were killed off. Many of the pigs bred go to Donegal and elsewhere, but the majority of them are fattened locally.

Practically irrespective of wages, labourers prefer not to attend to pigs. If they are not properly looked after, the keeping of pigs is not profitable.

The breeders and feeders are principally farmers with 50 or 60 acres. The smaller holder sells most of the pigs bred and only feeds one or two. He considered that feeding pays as well as the breeding. As a rule he fattened pigs which he bred, and found this system better than buying. If it were general, pigs would give a more uniform return, but sufficient accommodation for the animals is not always available. He fed 12 to 20 pigs in the year.

The normal price of suckers is 21, but he personally did not consider that this paid, and he would prefer to buy and feed them at this figure. Though his sows had two litters in the year, each of eight, he did not consider 21 sufficient. He would not like to rear unless he obtained 25/- to 30/-. For a time they were up to 45/-. They are always comparatively cheap at this time of year, but the price is now 18/-.

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Mr. Thomas Crawford—continued.

Mr. W. H. West—continued.

He preferred even at present cost of feeding to fatten the pigs before he would sell them at this price. He had nevertheless not yet noticed any sows being sold off, but the tendency would probably be to do so under existing conditions. A sow required as much feeding as a bullock or two calves and its maintenance was therefore a considerable matter.

The extent of the potato crop influences the number of pigs. A plentiful supply is an inducement to feed though the existing price of Indian meal might be a temporary discouragement and for a time reduce the price of suckers, but it was anticipated that prices would come back to normal.

From his experience of feeding pigs and calves he calculated that the respective returns would be equal. Feeding pigs is at least as profitable as the raising of any other class of stock. He carried out, under the Agricultural Instructor for the County, an experiment in the feeding of calves and found the cost of putting on 1 cwt. live weight to be 18/-.

At the present time he was conducting an experiment to test raw against cooked foods. The latter consisted of potatoes, Indian meal, and pollard, the potatoes were cooked and the meals given respectively raw and cooked. The pigs were five months old, were getting 8 lb. of meal equivalent, and making about 1½ lb. daily. Though the experiment had not yet been completed the lot fed on raw food appeared to be thriving better. If it could be shown that this system will give a good return it would be an advantage to farmers and would facilitate the food being given regularly instead of having to wait until it is cooked.

In his opinion the White Ulster breed is the most suitable; the sucker is more valuable than the York, and they do well afterwards. The main difference between the two breeds is in the head; he did not like the Ulster too bare of hair.

He did not keep a boar himself, but he favoured the location of more premium boars. Anyone who takes an interest in pig breeding will not object to a reasonable fee. The ordinary charge is 2/-. A boar is a great nuisance about the place, and some further inducement, especially to those who have ordinary sows, should be given or he did not think the premiums would be taken. Some of the common boars, however, were as good as the premium animals, and often left better stock.

He did not think that convulsions or other venge ailments were so prevalent as formerly. Improved housing would probably eliminate these troubles. They should have some exercise also. He found that when pigs were shut up in a close house that he invariably lost a number of them.

Though he occasionally profited by the market fluctuations he would prefer a more uniform return. He understood that the price for the current week was 61/6 as against 38/- in the week previous. A big market resulted in a lower price. The person who meets the wrong market is considerably discouraged. He had not observed other classes of farm produce to vary in the same way, the rise or fall is gradual. He would not say that any combination exists amongst pork buyers.

Mr. W. H. WEST, Secretary, Fermanagh County Committee of Agriculture.

Stated he agreed with most of the evidence given by Mr. White. In view of the importance of the swine-breeding industry to the county, he considered that the County Committee would be justified in devoting more of their funds to this industry. He thought that at present the inducement to keep a premium bull is greater. The number of premium to ordinary boars is probably 1 to 3, and in the case of bulls 1 to 50. Boars are scarce in the county in proportion to the number of sows, and the latter have frequently to be brought a long distance. Nearly every farmer has a sow, while the number of boars in the county is only 30 or 40. In some districts it had not been possible to locate the boars. When a sire is not available it might happen that there would not be any encouragement to keep sows. The number of sows in the county

is 2,000 only, and were they evenly distributed 30 boars should be sufficient, as a boar would take 100 sows. More premium boars were required to improve the quality. The number now is 8, and some of the balance should be replaced by premium animals. Although there were breeders inside the county, the Department's Inspector endeavours to bring in boars from another county. Premiums were formerly given to the Lough York, but were now taken up for the Ulsters, and this breed is giving satisfaction. It is customary for owners of premium boars to purchase them outright, and some of them pay 47/-; they accordingly often secure the pack of the animals marked for premiums.

He would like to see both the breeder and purchaser of boars get something extra, and suggested that the premium be increased to 47/- for the first and 25/- for the second year. The breeder should receive at least 40/-.

He had consulted a number of boar-keepers, and their view is that the fee should be raised to 2/-. This would not result in sows being sent elsewhere.

He had been thoroughly convinced of the utility of raw feeding. He now fed 40 pigs as easily as he could have dealt formerly with ten. Owing to the price which he could obtain otherwise he did not feed potatoes, but gave mangels, turnips, rutabagas, and a similar food pulped and mixed with raw meal. The returns from raw feeding were just as good in winter as in summer, and the food was given to the young pigs almost immediately after they had been weaned.

Twelve pigs from two litters which he had fed as an experiment returned him a profit of about 35/- each when sold for pork at 37/- . He bred the pigs; they were all farrowed and killed on the same days, and the 12 weighed 21 cwt. at 7½ months. The breeding and quality were alike, but one lot to which he gave some exercise weighed two stone extra. He fed both calves and pigs, and, calculating skim-milk at 3d. per gallon, he had found it more profitable for pig-feeding with pork at 36/- per cwt. than to give it to calves. In this matter he entirely disagreed with the previous witness. The food allowed to a calf gave a far better return when fed to pigs. He had given whole milk to calves until they were four to five months old, but gradually replacing it with skim-milk and meal. As compared with what they make when just carried round with ordinary grazing and hay, he did not consider that a calf paid for concentrated feeding. The food he used consisted of meal and pollard, and some crushed oats, which he grew himself. If the results from barley were equal to Indian meal, this should also be grown. The measure from pigs he had always regarded as more valuable than from cattle. Pigs properly housed always thrive better, and the accommodation in Fermanagh is bad in general. The farmers require to be educated on the feeding and housing of pigs. The best way to do so is by means of local demonstrations. Farmers should also be educated to the advisability of growing on their holdings all the food required. Everything grown on the farm should also be fed on the farm.

Anything from 16/- to 18/- for 8 weeks old pigs should leave a margin for profit, and if the sow is economically fed on raw food the profit would be greater. He believed that the breeding side of the industry paid well.

One of the primary causes militating against the industry is the fluctuations in the price of pork. Farmers do not understand this, and there is a lack of confidence between them and the merchants. If the reasons for these variations were more generally known it would tend to create a better feeling. In the last year he knew of a difference of 6/- from one market to another, and this would not be exceptional. He had seen 45/- for a farmer on one lot of pork owing to the change in price between two markets. He agreed that when prices appear to be going up farmers hold back supplies, and send them out when prices seem to have reached the maximum.

He preferred some other system to a dead meat market. The latter had progressed against the old practice of buying on foot, and the people would not revert to that. If the farmer could be advised of the price he would receive, he favoured sending in pigs to the curer direct and selling according to dead weight there. While he agreed that there would be difficulties in doing so, he thought they would be less than those

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Mr. W. H. West—continued.

Mr. WILLIAM R. THOMPSON—continued.

prevailing at present. He could not account for the advance recently of the dead meat against the live weight markets, as the offal is practically lost to the farmer; the value now is about 2/- each; if six or eight pigs were killed on the one day, the farmer could not retain the entire offal for consumption, and he has no outlet for it.

An effort had been made to establish a co-operative bacon curing factory, but the project did not materialise. The idea was to steady the price. He personally was satisfied with the market in Enniskillen, but others were not. He suggested that the quotation for prime quality pork should be displayed at the market in the morning. The farmer now does not know what to ask, though he agreed that this would not prevent fluctuations. He could appreciate the reasons for the fluctuations, but to satisfy farmers he would like to see some notification given as to whether there was a rise or fall. Farmers should be urged to send out pigs with greater regularity instead of rushing out for some markets.

Mr. WILLIAM R. THOMPSON, Esq., Irvinestown.

Stated he was a farmer and breeder and feeder of pigs. The shrinkage in 1911 he attributed mainly to the restrictions resulting from the Foot and Mouth outbreak which prevented some being taken to the fair. He drew this inference from what he had noticed in the county. The restrictions did not apply to his own district. The price of pork at the end of 1911 and beginning of 1912 was very low, and he knew that a number of sows were slaughtered. He agreed that the small crop of potatoes, the low price of pork and the high cost of Indian meal in 1912 were factors leading to the decrease of the following year. At present the industry is carried on as extensively as formerly, but the prices for potatoes and feeding stuffs will interfere with the sale of suckers, so that a number of the sows may be disposed of. He could not say that he had noticed as yet any tendency in this direction.

The extent of the potato crop considerably influences the number of pigs fed, almost irrespective of the price of pork. The potatoes are fed to pigs in order to convert them into money, though the return may not be very high. When the prospects for the crop are good the price of suckers at once goes up, and more are bred in anticipation of better returns.

He carried out an experiment in 1907 to test the value of Indian meal as pig-feeding. Four pigs were fed from eight weeks old, when they had been weaned, subsequent to which no milk was given. The feeding consisted solely of Indian meal, six stones of linseed meal and two stones tussle, and continued for about 14 weeks. The pigs weighed over 5 cwt., and at 4/- returned £11 7s. 6d. He valued the pigs at 4/- when the experiment commenced and the feeding cost £5 10s., viz., 14/6 per 2 cwt. bag of Indian and 8/6 per cwt. for the linseed meal. He considered that with Indian meal at 4/- and potatoes at 2/- per ton, 50/- per cwt. for pork would leave a small profit, and prevent a feeder from giving up the business.

He agreed that those who keep pigs are principally the small holders; the number of large farmers in the district is very limited. It is difficult to obtain labour, and though some of the small holders have to employ hired help, they do most of the work on the farm themselves. He had not heard of labourers objecting to load pigs. The man occupying one of the Rural District Council's cottages would receive 9/- to 10/- weekly and his food.

The White Ulster is the favourite breed; the York is not appreciated. He had two York boars some years ago, but the progeny did not please the people, though the pigs were all right. He considered the York to be a satisfactory pig, but a prejudice exists against it. From experiments he had carried out in breeding crosses from the Ulster and York he found that they fattened equally well. He had been in the habit of keeping a premium boar of the White Ulster type. He thought it would be desirable, in order to avoid in-breeding, to see that the non-premium ani-

mals were bought from outside districts. It is a common practice to buy boars the breeding of which is not known, and it may happen that they are related to a number of sows in the district. He paid 4/- for the sire which he now held, and he did not think that good boars could be bought for 2/-. The premium is too small. He would favour raising the premium to 4/-, and abolish the second year arrangement. When the boar is kept for two years it becomes too heavy, and may be the cause of in-breeding, and a second lighter animal has to be kept; whilst he knew of few persons who were in a position to maintain two boars. Were the premium increased he would be satisfied with the present fee. He did not consider that 2/- would prevent any sow from being sent to the premium sire, as he knew of no boar standing at less than this figure. The result would, of course, be the same if the fee were raised to 2/-, and the premium to 2/.

He thought it would be advantageous to farmers to have a co-operative system of marketing pigs; he believed that it would prevent some of the fluctuations which occur at present, the farmers to be advised as to when they should bring in pigs to the factory. The supplies now are rushed out one week and held back the next. He had no idea as to how the price of pork is regulated, but the popular opinion is that it is fixed by the buyers. Were it so, as he was now informed, that the merchants cannot anticipate the price for bacon, of course it would not be possible for the co-operative society to do so, and he agreed that as regards the outlet for pork the co-operative would be in the same position as the ordinary factory.

A fortnight before Christmas the price of pork in Irvinestown was 55/-, and in the next market 61/-; in the succeeding market 58/6, and on the following market 42/-. Farmers objected to these variations. He was aware that other farm products fluctuated at Christmas time, but he gave three as examples of the fluctuations which were constantly occurring. He had known of a difference of 4/- and 5/- between two markets. He would endeavour to furnish the Committee with the prices in Irvinestown for 12 months, as well as the number of pigs on each market day.\*

Mr. J. P. KEANY, Clontarf, County Leitrim.

Mr. Keany, representing Leitrim County Committee of Agriculture, stated he was a farmer and feeder of pigs. The price of Indian meal in 1912 was one of the factors contributing to the decrease in the following year. Suckers were selling at a small price; pork was low, and the outlook did not appear to be favourable. In consequence, a number of breeders reduced their stock of sows.

A plentiful crop of potatoes, according to price, is an encouragement to feed more pigs, but not so much so in his district as in others, as greater reliance is placed on bought stuff. Unless they can be sold for over 2/6, most of the potatoes are consumed on the farm.

In his part of the county the number of breeders is limited. One large breeder kept York pigs, but these were not popular. His success in the business keeps the White Ulster, which is preferred, as it is believed that they grow and finish better than the Yorks. Unless the County Committee place out boars that are more successful than some of them have been, he would not suggest that the Committee give a larger number of premiums; but if Ulsters are to be located he would be in favour of increasing the number. He had not himself kept a premium boar. Latterly sows are being sold off in his district and, he was informed, in other parts of the county also. Berhams were selling at 12/5 to 17/4. Calf-rearing and poultry are receiving greater attention, as the returns from both industries are more reliable and often better than from pigs. Compared with the time when eggs were cheaper, there is not the same anxiety to keep pigs.

He could offer no opinion as to the cause, but the uncertainty of the price obtainable for pork is a factor which discourages feeders; other farm produce does not

\* See Appendix 10, page 158.



ENNESKILLEN, 12th January, 1915.

Mr. J. F. Keany—continued.

Mr. Thomas McGovern, J.P.—continued.

vary in the same way. The prices in Manohamilton and Enniskillen are usually equal, but in the former market do not fluctuate to the same extent; in Enniskillen the prices sometimes are from 1/- to 2/- higher than in Manohamilton. Most of the buyers in the two places are the same. Three or four firms would be represented in Manohamilton. In the end of October he took two pigs to Enniskillen which he sold at 55/-, the previous price was 61/-, 55/- was not the top price, but he thought it would be 57/- or probably 59/- generally. When he asked the price of the previous market (61/-) the buyer left him and he had eventually to bring the pigs to a curer. He understood, however, that exceptional conditions prevailed on the day in question. He thought the seller was better off when he had a market for live pigs. Pork is a perishable article and must be sold.

Very little work is carried out with horses in North Leitrim and the cost of labour has gone up, with the result that tillage has decreased owing to the fact that it is slower to get it done. Although Leitrim is not very suitable for horse labour a great deal more of it could be done and its introduction would be a decided advantage. At present a move is on foot to have a little co-operation to provide horses for this purpose.

Piggeries are not provided in connection with Rural District Council cottages, and where the occupiers wish to keep pigs they have to make some provision themselves for the animals. It would have induced labourers to keep more pigs had this accommodation been provided in the first instance.

Mr. THOMAS MCGOVERN, J.P., Chairman,  
Manohamilton District Council.

Mr. McGovern, a member of the Leitrim County Committee of Agriculture, stated he was a farmer and shopkeeper and he kept pigs. He concurred with the previous witness as to the losses contributing towards the shrinkage in 1913.

It is not usual in Leitrim to sell potatoes unless they reach a high price. The local supply is generally insufficient for ordinary requirements. When the supply is plentiful and cheap more pigs will be fed, but owing to the large amount of meal used the price of this had an important effect.

A greater crop production would result in more pigs. Tillage in the county is very limited except with the spade, and that system is expensive. Up to the present the people were not acquainted with the use of horses or ploughs. It had been difficult to get the Department to appreciate the position fully, but he was under the impression that they now realised the needs of the district in this connection.

Except on small farms where the work is done by the occupier, labour is difficult to obtain. Members of the small farmer's family find they can make more money by going away as labourers than at home.

In view of the higher prices prevailing for poultry and eggs some people are turning to them and giving up pigs. Poultry and calves generally are receiving a greater attention. In the summer season when eggs are plentiful they are bought and preserved to prevent loss; this steadies the price over the winter. It would be an advantage if some similar plan were practicable as regards pork when a heavy supply comes on the market. Before the creamery system was introduced butter had to be sold at 6d. lb., or perhaps could not be sold at all; he acknowledged, however, that the butter was made and kept under unfavourable conditions. He wanted something analogous to the creameries to deal with pork. He would not say that a co-operative bacon curing factory could turn out better stuff.

The fluctuations in the price of pork are greater than in any other farm commodity. He had considered that the buyers were responsible for the fluctuations. When they saw more pork in the market than they had orders for they took advantage of sellers; of course the temptation to do so is natural. He was under the

impression that on a small market some arrangement existed by which the curer who did not get enough would give what he had purchased to another, and that buying was no better; that the buyers acted in the same way as the cattle dealer, who when he found prices did not suit him at a fair did not buy at all. On reviewing the matter, however, he acknowledged that a smaller market means heavier competition and better prices and that this competition would indicate that no understanding existed as regards prices. He thought, however, that there would be a danger of combination on a big market, as the buyers can see that the pork will be sold at any figure. He considered that it would obviate much of the difficulty if the Department would establish curing factories at a few centres to deal with any surplus pork which could not be sold to advantage on the ordinary markets. The farmer could then send on to these centres any pork which he could not sell owing to the existing combine. He was sure that the farmers would prefer to trust the Department more than the curer. He did not know what outlet the Department would have for the bacon. He understood that the prices of pork were regulated by supply and demand and the imports from Continental countries. He admitted that curers might have their own difficulties, but he considered it necessary to have some arrangement by which the farmer can get a fair price for pigs when they have been slaughtered. He had no evidence to show that a combination existed amongst curers, but the people would not be convinced to the contrary. It is difficult to sell a heavy pig, yet if a country shopkeeper tries to purchase in the curers' representatives immediately advance their price. The buyers dislike a heavy pig, but will take it as soon as they see an outsider coming in.

He sold to his customers a limited number of pigs every week by auction and gave credit for the price for four months. Several people obtain pigs from him in this way who would never get them otherwise; the pigs are chiefly wanted in April and May when money is scarce. Although it would not be to his personal interest, if provision could be made to give small farmers and labourers loans for the purchase of stock, it would be of great advantage. His experience showed him that the facilities which he provided induced many people who would not otherwise keep pigs to go in for the industry. He obtained a joint and several bill for the price. He agreed that if the purchasers adopted this policy they should be able to get a loan from a loan bank. It was a case of giving a man assistance to get a pig, and he advocated any system that would have the same effect. He found it very hard to sell young pigs at the present time even on credit, and he thought that for this the current high price of feeding was responsible. In some cases he sold pigs from Sligo. He did not know the breed, but the pig there is a long animal, with overhanging ears, that is supposed not to fatten so quickly, and the people do not like them. They want a pig of fine quality that can be finished early. The pigs reared around North Leitrim take better; they eat not so big or coarse and grow and fatten quicker. The custom now is to feed for four months only; the old practice of keeping pigs for a lengthy period has died out, though the big pig from Sligo is probably kept for a considerable time still. It is not the practice now to run pigs out on the grove.

He thought it would be desirable to have more premiums here in Leitrim. He was aware that the Department gave a number of special premiums in the county. He understood that the County Committee had difficulty in getting the premiums taken up; there is a general complaint of too much red tape.

Mr. WM. O. SMITH, Agricultural Instructor to  
Fermanagh County Committee of Agriculture.

Submitted particulars of experiments which had been conducted under his supervision in connection with the feeding of pigs and calves, showing the comparative cost of raising 1 cwt. of pork and beef. All the foods were charged at standard prices fixed by the Department.

ENNISKILLEN, 1913 January, 1913.

Mr. Wm. O. Smyth—continued.

Nine experiments were conducted during the years 1912-13-14 on 54 calves, varying from four to eight weeks old when experiment commenced and fed for a period of 16 weeks; 6 calves fed in winter and 48 in summer. Gaining changed at rate of 8½ per cent for 16 weeks; hay 2½ per cent.

	cwt. qr. lb.
Total weight of calves at end of experiment, ...	134 0 3
Total weight of calves at beginning of experiment, ...	67 2 21
Total live weight increase, ...	86 1 10
Cost of all food consumed, including hay and grazing (attendance not included) in producing above increase, £88 8 8	
Average cost of food used in producing 1 cwt. live weight increase, ...	6 19 9

Results of two pig feeding experiments carried out during the years 1913-14 on 14 pigs, which were about 18 weeks old at beginning of experiment. Eight pigs fed 16 weeks, 6 pigs fed 19 weeks.

	cwt. qr. lb.
Total live weight of pigs at end of experiment, ...	27 8 8
Total live weight of pigs at beginning of experiment, ...	9 1 14
Total live weight increase, ...	18 1 22
Cost of food consumed in producing above increase, ...	£25 10 7
Cost of producing 1 cwt. live weight increase, ...	1 8 2
Cost of producing 1 cwt. dead weight increase, ...	1 17 7

Mr. Wm. O. Smyth—continued.

Dead weight, obtained by actual weighing in market. Live weight obtained by calculation from dead weight.

The Scottish Co-operative Wholesale Society reported as follows regarding the curing test made by them on eight pigs, four of which were fed on cooked meals, etc., and four on raw meals, etc.

Four pigs fed on cooked meals, etc.

	cwt. qr. lb.
8 sides fresh, weighed ...	2 8 24
8 " ex salt, weighed ...	2 8 20
8 " dried, weighed ...	2 8 1
8 hams fresh, weighed ...	1 1 15
8 " ex salt, weighed ...	1 1 15
8 " dried, weighed ...	1 1 7

Total loss in curing=31 lbs.

Four pigs fed on raw meals, etc.

	cwt. qr. lb.
8 sides fresh, weighed ...	8 0 16
8 " ex salt, weighed ...	8 0 15
8 " dried, weighed ...	8 0 1
8 hams fresh, weighed ...	1 1 18
8 " ex salt, weighed ...	1 1 18
8 " dried, weighed ...	1 1 10

Total loss in curing=23 lbs.

No difference could be detected in the quality of the bacon for eating from the two lots.

## TWENTY-THIRD PUBLIC SITTING.

SATURDAY 16TH JANUARY, 1913.

AT 10 O'CLOCK, A.M.

At the Courthouse, Cavan.

### PRESIDENT:

Mr. JAMES B. GORDON, B.Sc. (Chairman).

Mr. SYDNEY O'MARA.

Mr. PATRICK CUSACK.

Mr. J. WHARFORD, J.P.

Mr. O. W. H. ROYSTON, B.A.

Mr. ANDREW MCCARREN, St. Helen's, Cavan.

Mr. Andrew McCarren—continued.

Mr. McCarren stated he was an expert of pigs. The shortage in 1913 he considered would be due to the high cost of feeding stuffs in the previous year. The small holders are the principal breeders and feeders, and are in a position to do the work without outside help. The large farmers, however, are handicapped owing to the labour difficulty. Moreover, male and female servants are unwilling to feed pigs. Thus class of farmer, accordingly, goes in for cattle and sheep.

He agreed that poultry keeping appeared much more than pigs to many small holders and that this business is profitable.

He understood that Cavan is one of the greatest pig producing centres in Ireland; but pig rearing generally is not regarded as more than a subsidiary business; pigs are looked upon as a small asset, and in Cavan and over Connacht farmers do not give them sufficient care and attention. Proper housing is not provided. If the best results are to be obtained he

believed that pigs should receive the same consideration as any other class of farm stock. The smaller holders should be enabled to erect suitable accommodation, and the Government should make grants or loans for this purpose; he acknowledged that the principle of giving grants might be a difficulty, but throughout Ireland it is the poor man in the country and towns who feed pigs, and these people should be afforded some assistance.

Another cause of the shortage in 1913, and one likely to operate in the same way in the near future, was the killing and export of young pigs to the other side. This trade had been extensive within the past six months, and he thought it would continue. In County Cavan alone a number of small pigs from 7 to 10 weeks old are purchased and taken to Counties Monaghan, Armagh, as well as Longford and Westmeath, by dealers who retail them, giving credit where necessary; portion of the money is collected at once and the balance afterwards when the pig is fattened. The

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Mr. Andrew McCarren—continued.

Mr. Andrew McCarren—continued.

system works satisfactorily. A number of the pigs bought in Cavan were formerly also shipped to Ayrshire. The shipping trade with England is maintained from about 1st September to 1st May, but he continued the business himself throughout the year. The shipping business had been seriously interfered with by the restrictions in connection with Swine Fever outbreaks and Foot and Mouth disease. He had a depot in England. He had no Welsh trade and was not conversant with the conditions there. His trade was with the industrial centres in the north of England and also with Scotland. These pigs are for pork mainly, but in the summer the trade is general, except with the exception of supplies for the bacon merchants. When it pays to fatten at home, the pigs are sold for finishing in this country; but when home fattening is likely to be unprofitable the practice is to ship the young pigs. Eight to 10 weeks old suckers would be bought from the breeders at an average cost of about 18/- recently; the price ranges from 10/- upwards, and on the previous Tuesday he had paid 25/- for some. The price has dropped for the past six weeks. These pigs go to a wholesale market, the return depending on the weather, supply and demand; the price runs from 6d. to 7d. a lb. at ten weeks old, and the dead weight of a good boarman will be 40 to 50 lb. The pigs shipped to Manchester and Birmingham are 9 to 13 score lb. In the North of Ireland the trade is practically confined to the export of pork; the buyers in the south are principally the representatives of the southern curers, who also take pigs from the west and north-west. He agreed that the system of marketing dowl pigs is encroaching on the live weight market. Since Christmas last, the actual price realised for pork 14 to 15 cwt. did not average throughout Ulster more than 88/6, though he knew that a higher price was paid in some markets. The home killing of pigs in the north results, in a great many cases, in the loss of the offal, which should, he thought, be worth at least 2/-. In the south the price would have worked out at from 60/- to 64/- and more recently 65/-. He attributed this to the competition of the shippers in the south. It would be better for the farmer if similar competition prevailed in the north. He considered that additional competition meant a higher price to the farmer. In his view the more outlets of this sort available the better. The trade is mainly dependent upon the curers, but were it entirely so the farmer would not get so much. His trade might be an exceptional one, but he bought anything in the way of a pig, paying from 35/- to 45/. He would emphasise, however, that the public want, and the general demand is for, slaughter pigs, both for the curer and the pork butcher. If this country does not supply the class of stuff required, it will be procured from elsewhere. If merchants do not cater for the requirements of the British trade, it will go to the foreigner. It is difficult to lead the farmer to understand the necessity of producing the article wanted on the other side.

It would be to the advantage of the whole industry if pigs were produced in greater numbers, provided the increase is gradual. Extreme fluctuations are detrimental to the business, but the fluctuations in the price of pork are not due to the Irish merchants.

Continental countries are entering for British markets and sending over the class of article required in greater quantity. During the past five years this competition has been becoming serious. The only way to out the Dane was by maintaining the supply and quality. There are customers enough if the article is available. A gradual increase is desirable.

The pig sold at 20/- here is worth 24/- for exporting, but the restrictions imposed by the Board of Agriculture on live pigs is a great drawback to this business, as are also the high freights and inadequate shipping facilities.

Pigs fed in the North of England are marketed from 8 stone upwards to suit local requirements. At 8 stone the pig would be about 20 weeks old. He was not acquainted with the trade in the South of England, but he understood that medium sized pigs are wanted there. Pigs 11 to 13 stone, however, are required everywhere.

Shippers could export a much greater number of pigs from this country and still find a good market for them. It would be a great advantage to him to have a gradually increasing number of pigs.

Irish merchants want pigs 14 to 15 cwt., and this fact is being recognised about Cavan, but not so well in the west, where too many overweights are produced, the price for which is not satisfactory. The animal over 2 cwt. dead weight does not return within 5/- per cwt. of the scaleable weight even on the English market. The pig that suited Ireland also sells best on the other side. The heavy pig when cured is used in the industrial centres and does not sell at the higher price, so that it is not to the advantage of the farmer to allow pigs to reach heavy weights. The farmer's idea is that after 14 cwt. the pig improves better, but this had not been his experience; the pig may put on more flesh daily, but it consumes a proportionately larger quantity of food. The farmer makes a mistake in only finishing two lots in the year; and his opinion was that the farmer should fatten November to pay the rent, but this practice is not profitable, as the price is proportionately lower. He believed, however, that it is but a matter of time until the west gets out of this system and becomes educated to the advantage of improved methods. The Danish Government have dealt with the problem by advising farmers not to retain pigs too long. When pigs realise from 40/- to 50/- per cwt. they pay the dealer and the curer. With normal prices for pork and feeding stuffs and a fair potato crop everything would be better. He did not consider that 25/- for pork would pay anybody owing to the present prices of feeding.

The pigs in Cavan are largely of the White Ulster type. He would not consider them unsatisfactory, but they are not a firm pig for the export trade. The feeding consists of Indian meal with potatoes, and the tendency is to produce a lot of fat, which merchants generally do not want, neither do the public, except in Lancashire. Unless when buying from dealers the bacon curers do not discriminate between a very fat and a lean pig; and a similar practice prevails with the northern curers. The people in the north may be satisfied with what they have, but it might be possible to give them something better. For the export trade the Large White York is preferable, and he believed that this pig is also liked by northern curers. The Ulster is not able to stand any hardship. He believed that the York produces a leaner bacon.

The Ulster pork goes principally to the North of England and Scotland. The English industrial centres take about equal proportions of long sides and rolls. Miners take fat bacon, but for the better class trade the finer article is necessary, and for this the Large York must be depended upon. He thought a mistake had been made in Cavan and in Ulster in the men sent to select the York premium boars; the proper animals were not got. It is recognised that the York does not always mature so quickly as the Ulster, but it does so after from 1 cwt. to 1½ cwt.; it can also be fattened at any age, and when finished it is a much better animal. At the moment he had Large York pigs fat at from 8 to 12 stones; a good deal depends upon the strain. He acknowledged that the northern curers are satisfied with the York and the southern with the Ulster. In the circumstances he could not suggest any change, but the Department have an Agricultural Station in County Cavan and he thought they should raise some Yorks there and experiment with the breeds; the animals could then be distributed at reasonable prices.

Mr. P. MacDOUGHER, Secretary, Monaghan County Committee of Agriculture.

Mr. MacDOUGHER handed in a paper which had been prepared by Sir Nicholas Gosnell,\* who was appointed to represent the Committee but who had not found

\* See Appendix 5, page 186.

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Mr. P. MacGeough—continued.

it possible to attend. This paper dealt largely with the use of new food and the matter had been before the County Committee on a few occasions. They considered it desirable to have more experiments carried on in this connection as it is difficult to induce farmers to appreciate the results. He quite agreed as to the importance of local demonstrations and publication of the results in leaflet form. He would submit particulars of the results already obtained. The continuity of the experiments had, however, been interrupted with owing to a change of instructors in the county.

Mr. P. MacGeough—continued.

When the return from pork is low and food dear people turn to the raising of calves and cattle, and this is the tendency owing to prices now prevailing. More poultry also are being kept, but he did not think they would be responsible for any decrease in pig numbers.

He also submitted the following table showing the number of pigs exposed for sale at pork in various markets in County Monaghan in recent years. He had obtained these figures from the weighmasters at the respective markets. In one case he was himself the market clerk.

Year.	Monaghan.	Clones.	Carriekmacross.	Castleblaney.	Ballybay.	Total.	Net.
1906-7	8,718	16,818	—	—	—	—	—
1907-8	7,965	16,329	—	—	—	—	—
1908-9	4,935	14,597	—	—	—	—	—
1909-10	7,157	15,879	14,200	9,310	6,179	52,725	47,725
1910-11	8,142	16,595	13,500	9,193	5,890	55,420	50,420
1911-12	10,084	17,210	14,975	10,930	5,836	59,135	53,665
1912-13	10,855	15,560	19,114	11,869	5,542	62,950	57,150
1913-14	6,337	14,872	16,149	10,607	4,464	53,119	48,119
1914-15	7,603	15,500	16,509	11,000	5,600	55,600	50,600

These comprised all the markets in Monaghan. The net figures represented the total, after deducting the numbers of pigs which he had estimated came to these markets from places outside the county. Clones and Carriekmacross are near the boundary and he had deducted a proportion from these markets. The figures indicated the importance of the industry to the county and showed that, except in 1911-12, there had not been much change.

A small number only are shipped alive, probably not more than three or four thousand annually. There are no markets in the county for live pigs.

The County Committee started their Swine Scheme in 1902 and up to 1907 gave premiums to the Langa York, when they found it becoming very unpopular. They thought at first it was due to prejudice. What was known as the Government pig got a bad name and he did not think it would be possible to re-introduce the York; the belief is that it is not finished for a month after the Ulster and that consequently there is a loss of 17/- to 20/-. The breeder and feeder are better satisfied with the Ulster, and since 1908 the Committee have taken up the Ulster. There are now more applications, and the amount for sows (and goats) was increased to £80. Within the past year or two he could have located many more boars had money been available. The allocation for the current year for live stock comprised, for horses, £188, cattle, £305, and boars £75.

The procedure follows the Department's scheme. The Committee decide on the number of premiums they can give and the money is allocated accordingly; the number available is advertised; the Committee select from the applicants those who are to get boars, and each applicant is then communicated with as to whether he will procure a boar himself or wish the Committee to do so for him. In the latter event the Committee, through their members and officers, with the consent of the applicant, endeavour to provide the boars and do not limit themselves to 25. The applicants allow them to go as high as 47, and 48 is readily paid. In this latter respect he understood that the system of obtaining premium animals differs from the majority of counties. Before the boar is purchased the applicant is asked to deposit 25 and to specify the class of animal required; some ask for strong and some fine boars. The usual maximum price is left about 48. In the first years some members of the Committee undertook to see the boars at the breeder's residence, but they do not always like to undergo this trouble and expense, and the practice now is for the Instructor himself to visit the herd. If much time or trouble would be involved in doing so he asked the Department's Inspector to see the animal. By giving more than 25 the buyer has his choice of a number of the boars marked. If the applicant states that he will

himself purchase a boar he is allowed to do so and is supplied with any information desired. If he indicates that he has an animal which he considers suitable, arrangements are made by the Committee to have it inspected by the Royal Ulster Agricultural Society and by the Department.

Judging from the number of applications, the advantage of these higher class boars is realised, and in view of the present demand he did not think the Committee would be justified in raising the value of the premium. The Committee had come to the conclusion that when the price of pork falls from the present figure they would have a difficulty in reducing the premium and they preferred not to increase it temporarily.

He acknowledged that the profit on keeping a boar is not very much, but the people seem satisfied; he thought many of them looked to the fact that they had the use for their own sows and that in this way the premium paid them. The number of sows taken by the premium boar would sometimes be 100, but usually about 60. A limited number only are kept for a second year. Before being disposed of for pork the boar is castrated and fattened, but the price is comparatively low.

The ordinary fee is 1/- and in some districts is paid in kind instead of in cash; he feared that it might be difficult to obtain 2/- for the service of a premium boar, and he would prefer that it be left as it is.

Mr. ANTHONY CASSIDY, J.P., Co.C., Monagh,  
Blacklion, Co. Cavan.

Mr. Cassidy, representing Cavan County Committee of Agriculture, stated he was a farmer, and feeder of pigs. He attributed the shortage in 1913 to the low price of pork, the high cost of feeding, and the scarcity of potatoes in the previous year. He was of opinion that in his locality the industry had been on the decline for some years owing to the scarcity of labour and decreased area under tillage. He agreed, however, that the breeders and feeders of pigs were mainly small holders who relied upon themselves and their families to do the work, but many of the younger people are emigrating.

At this time of year the pigs are usually sold after being fattened on potatoes, and if the crop is bad a second lot of young pigs is not bought in to replace them. If feedings were plentiful two or three lots would be fed in the year. The price of Indian meal is a big factor except when potatoes are plentiful and cheap. In the latter case pigs will be fattened irrespective of the price of meal; the price for pork, of course, has some influence, but very little when feeding stuffs are cheap; the anticipation is that pork will

CAVAN, 16th January, 1915.

Mr. Anthony Cassidy, J.P., Co.O.—continued.

improve by the time the pigs are finished. The practice of feeding pigs for a lengthy period is no longer customary. Those who go in for making money out of the business endeavour to have pigs for sale after four months feeding and to finish three lots in the year.

Farmers and feeders do not believe that the dealers and curers always give them as much for pork as they might. They complain about the fluctuations in price. Farmers were, he thought, quite satisfied to regard ordinary fluctuations as being due to supply and demand. Occasionally complaints are made that buyers put their heads together and in the case of a big market combine to cut down the price—he was referring to Enniskillen market. The buyers are slow to come out, and buy lower. He was now informed that a small market causes the competition to be keener and that buyers may have to pay a higher price if they are to get supplies, and that this competition did not become necessary when the market is larger. He did not consider, however, that even on a small market curers would buy pigs at a loss or that they were so dependent on getting regular supplies; he could appreciate a difference in the demand about Christmas, but at ordinary times of the year he had been under the impression that the curers obtain supplies to carry them over a certain period. He believed that before the market commences the buyers have an understanding as to the price they will give on a large market, based not to the demand they have but on the figure at which they can get supplies. He agreed that on a small market no ring existed. If there was a ring he did not think it could prevent pork rising when the stuff became scarce. The farmers at a certain time held a special meeting to discuss the matter and they contemplated having an expert to represent them on the English markets and centres of consumption to ascertain whether the curers were paying sufficient for the pork, but the latter rose in price immediately afterwards and the project was not pursued. The intention had been if the price in the local market was unsatisfactory to advise feeders not to sell but to wait and dispose of the pork through an agent on the other side, where it was hoped there would be a sufficient demand for it as fresh pork. Sir Horace Plunkett was, he understood, interested in the project.

He was under the impression that the market quotations even prior to August last varied to the extent of 8/- or 6/- from week to week. He would not blame the curers if they lost on one occasion that they should endeavour to make good the next time. Farmers consider that curers have too great a margin of profit; he had heard bacon curers say they wanted 41 per pig of 14 cwt. weight; he doubted very much whether they would be satisfied with 1/-, though he agreed it would represent a fair profit. He did not understand the conditions which governed the prices paid by curers. The Co-operative Society were buying pigs in large numbers about Enniskillen for the British market and he knew that they had to have regard to the retail prices that could be obtained. The average weight would be about 14 cwt. for pigs sold in Enniskillen from his district. A number of 8 stone pigs are also sent to the London market for pork.

He would suggest that the Department should encourage and subsidise the establishment of bacon curing factories for the curing of the farmers' pork in central districts where there are no factories already. This would give pig feeders confidence that they were in a position to get the full market value of their pork, and he not so much in the hands of the middleman, and consequently give a great stimulus to pig feeding.

The cull of pigs killed at the vicinity of towns is sold to the poorer people in the town for a couple of pence. In country districts the heart and liver is consumed locally and the fat rendered; the remainder goes to loss; any edible parts that could not be used at once might be sold. At a time when a public slaughterhouse was available the hearts and livers were sold to anyone requiring them.

When the Large York premium boars were first located they did not compare favourably with the local stock; they were coarse and rough, with too much hair, and did not fatten satisfactorily. The Ulster boar is more popular, and he considered this breed to

Mr. Anthony Cassidy, J.P., Co.O.—continued.

be the best suited for the county. Except in one or two portions of the county he understood that there was no difficulty in getting applicants for the premiums.

Poultry are receiving more attention from the smaller holder owing to the high prices obtainable for eggs. It is considered that they give a more regular return and are preferred by the women of the house. The new breeds of turkeys have been a great benefit, and turkey rearing is carried on to a greater extent. This business is interfering with pig feeding.

The cottages built by the Rural District Councils are provided with a shed that can be converted into a pig house, or used for cattle. With the new cottages he understood that provision had invariably been made for pigs and poultry.

Mr. THOMAS McLARNEY, Drumburkille, Lough-Guff, Ballinaghy, Co. Cavan.

Mr. McLarney, a farmer, stated that he represented the Cavan County Committee of Agriculture, but was not a member of the Committee. The importance of the industry to the county is fully recognised. Pigs are supplied to surrounding counties, and the breeding side of the industry receives considerable attention, farmers keeping two or three sows. He had noticed an improvement in the quality of the pigs since the introduction of premium boars, and he considered the White Ulster to be quite suitable.

Cavan is mainly a county of small holders and the labour question does not present any difficulty. The price of foodstuffs is the main outlook. When the cost of Indian meal is high people are not inclined to bread or feed; the price of suckers goes down. Owing to these causes a number of sows were disposed of in 1912, and within the previous two months a number of young pigs had been sold for immediate killing. The people who formerly fed them are afraid to do so on account of the uncertainty of prices for feeding. A large proportion of the pigs are fed by shopkeepers and labourers, even in towns, and these depend entirely upon imported foodstuffs. Indian meal is 19/- per 2 cwt. bag, and it will not be bought for pig feeding at this price. The feeding usually relied on consists of refuse potatoes, some cabbage, and Indian meal. The result is that young pigs that would be bought at a fairly good price are now sent away and slaughtered for pork. This shipping trade exists only when the young pigs drop to a low price. If the price is normal they are fattened. Four stone suckers have since the beginning of December been selling at 12/- to 14/-. Were it not for the shipping outlet they could not be disposed of at all. Nevertheless farmers are as yet holding on to sows in the hope that conditions will improve; they are more afraid of what feeding will be than what it actually is. At the last market pork was 55/- to 56/-; it reached 56/- on one day.

He considered that encouragement should be given to farmers to retain the best sows for breeding. Some scheme should be adopted with this object; he would not mind how small the prize was, as it would provide a spirit of emulation; the prizes could be given at shows or local centres, and they would have the effect of improving the breeding. It is the custom with a few people to keep for breeding a starveling which is not likely to be thrifty for fattening, and the progeny were destroyed. He did not think it would be practical for boar owners to refuse to allow boars to suck sows.

He believed that if the industry is to be developed the people must be educated to depend more upon home grown produce, so as to be independent of imported feeding.

Mr. OWEN TRAYNOR, Termon Lower, Billis, Virginia, Co. Cavan.

Mr. Traynor, a farmer, representing the Cavan County Committee of Agriculture, stated that while the number of sows in the county is considerable he

CAVAN, 26th January, 1910.

Mr. OWEN TRAYNOR—continued.

would not understand why pure bred boars were not also raised. He recognized, of course, that it was a matter for private enterprise. He would like to see some place convenient to which buyers could go to see the animals they were purchasing. Applicants for premium boars should have facilities for making their own selection instead of having to take animals that they never saw before. He did not like the present system by which the County Committee arrange to have the boar sent on direct to the applicant. If the buyer were allowed to please himself he would be prepared to give a better price. His view would be that the County Committee should supply applicants with the names and addresses of a number of breeders, and be believed that the applicant would then be willing to pay his own expenses in going to see the herds. He preferred, however, getting the boars in the county. He suggested that the Department should keep Large White Ulster boars and sows at the Agricultural Station at Ballyhaunis.

There was a live as well as a dead market in Cavan, and he thought the Department should afford assistance in regard to the marketing of pigs. The live animals are sold by hand, and the farmer is not in a position to know the value as he is not as good a judge of the weight as the dealer. Buyers will not take these pigs over the scales. Moreover, farmers do not understand the calculation of live and dead weights. He recognized, of course, that if the farmer was not satisfied with the price of the pig alive he could have it killed and sold as pork. When the pig is killed, however, the farmer must take the price offered, and the impression is that this price is arranged by a ring among buyers.

The fluctuations in the price of pork are most discouraging. The price varies from week to week. If the farmer could not get any assistance in this direction he thought it might be desirable to have the pigs sold by live weight. From the conditions as now explained to him which governed the trade on the London market he could understand that the price of Irish pigs must be regulated accordingly. At the same time if the Committee had obtained their information in this connection from representatives of the curers he would not be inclined to give it credence. He considered that the farmer is not getting enough for his pig either alive or dead; but a short period elapses from the time the curer gets the pork until it is sold as bacon, and a fair calculation should be made of the price that will be got, while the farmer has to look six months ahead when he buys young pigs.

He would like the Department to take steps to keep the market at a uniform figure. He thought the price should be fixed at 57/6 for September to March, and a fair average for the other six months would be 65/- per cwt. He thought that if the price of foodstuffs does not fall in the near future the number of pigs kept will be greatly reduced.

Mr. J. P. GANNON, Secretary, Cavan County Committee of Agriculture.

Stated that in 1901 the Committee brought from County Cork 24 boars and 25 sows of the Large York breed and these were sold to farmers in Cavan at an average proportion of the cost. The progeny were not considered satisfactory, and the scheme was allowed to drop. In 1908 when the Committee heard of the White Ulster this animal was pushed, and in 1911-14 premiums were taken up, the number since has steadily increased as follows:—In 1912, 17 premiums; 1913, 19 premiums; 1914, 28 premiums. The prejudice against premium animals has been eliminated, and the people believe the type they are now getting is suitable. The

Mr. J. P. GANNON—continued.

boars were supplied through the Department, and in every case the report on the quality of the animal is satisfactory. 45 is the usual price, 45 being deposited and the balance deducted from the premium.

Cavan is an extensive pig breeding county, and the stock is good. Farmers are difficult to please as regards boars, and unless the premium animals show a distinct improvement they will not be accepted.

He submitted figures showing allocation by the County Committee for live stock; this amount was fixed by the Department, but was divided by the County Committee as follows:—Horses, £100; cattle, £120; and swine, £110. Provision was made for 23 boars, viz., 8 second year and 15 first year. No difficulty is experienced in getting applications, and he considered that if the Committee set aside additional funds for the scheme more applicants would come forward. Many of the members objected to reducing the allocations for horses and cattle, but owing to the demand for boars the Committee last year thought it desirable to afford additional assistance to swine and deducted a portion of the amount set aside for horses.

He had heard no complaints as to the value of the premium, and the people seemed to be satisfied; he did not consider that in present circumstances the County Committee would be justified in increasing the premium; if they do so the number will probably have to be curtailed. He would prefer to have the lower figure and have the larger number of boars looked.

Whilst it might be that 45 or 47 could be got for a better boar, he thought it would be to the interest of the breeder to sell a number of boars to the Department instead of keeping one or two outstanding animals to dispose of to private breeders. He understood that though some of these animals are just value for the 45 others might be worth considerably more and he agreed that it was only reasonable to allow the breeder to dispose of them to the best advantage. His experience had been that the Department's Inspectors do the best they can to select good boars, and in Co. Cavan their selections have been very satisfactory.

The dead meat market in Cavan is capable of accommodating a thousand pigs, and the buyers can take that number. 570 were marketed in the previous week; the number is increasing steadily and a second set of scales had to be erected. A pig is never left unsold. The animals can be brought alive into the town, killed in the abattoir, and disposed of next day in the public market. Sixpence per pig is charged for killing, and part of the offal is retained as a perquisite of the killer. The pigs are hung up and sold in the shambles to the curers.

Mr. DANIEL REILLY, Main Street, Cavan.

Stated he was a farmer and shopkeeper. He concurred in Mr. Traynor's remarks as to applicants being allowed to select their own boars. He now understood that it was quite within the discretion of the County Committee to make the necessary arrangements in this connection.

He also agreed with Mr. McLarny's suggestion that encouragement should be given to breeders to retain their best sows, and as regards breeding from unsuitable animals.

He would point out that the pig brought alive to a market is not in a fit condition to kill that week. It is customary to allow the animal to remain for some time before killing to ensure that it is slight. The handling which is necessary coming to market makes it unsuitable for pork, and when it comes on the scales it would be faulted for lameness. He did not know whether this was due to the breed in the district or not. A fine pig with no hair gets damaged quickly.

# **TWENTY-FOURTH PUBLIC SITTING.**

**THURSDAY, 28TH JANUARY, 1915.**

**AT 10 O'CLOCK, A.M.**

**At the Office of the Department of Agriculture, 4, Upper Merrion Street, Dublin.**

## **PRESENT :**

**Mr. JAMES S. GORDON, B.Sc. (Chairman).**

**Mr. B. N. BORN.**

**Mr. PATRICK CLUNE.**

**Mr. J. WHALEINGTON, J.P.**

**Mr. O. W. H. BOULTON, B.A.**

**Mr. J. W. STEEN, Live Stock Inspector to the Department of Agriculture.**

**Mr. J. W. Steen—continued.**

**Inspector for Northern Counties in connection with Live Stock Schemes of the Department.** For the past ten or twelve years had been engaged in connection with the purchase and location of premium boars and the annual inspection of these animals. His evidence was confined entirely to the conditions prevailing in the counties of Ulster.

In the Ulster districts from which potatoes are exported they will not be fed to pigs when the price is good, but when plentiful and cheap many farmers buy young pigs to fatten, the immediate effect is to enhance the cost of bonhams and more young sows are kept for breeding purposes, with the result that in about 12 to 18 months time there are too many young pigs. When the crop is poor more refuse is available for feeding, so that it is rather difficult to state clearly the final effect of a good or bad crop. In some parts of Donegal there is not enough potatoes grown for household use and to supply the towns, and a quantity has to be bought in from other districts.

The cost of Indian meal and other feeding stuffs and the price for pork are the main factors which influence the number of pigs kept by the farmer. The sound policy for Irish farmers who follow pig rearing and feeding is to keep an almost steady stock and not rush to sell at one time, and unduly increase the stock at another, as markets fluctuate. A comparatively level stock of pigs and a uniform output should be better for the breeder and feeder and would place the Irish curing trade on a sounder basis.

The price of suckers has been so high in recent years that many workmen did not feed who would have done so had young pigs been selling about 25/- to 25/- at 9 to 11 weeks old. They had recently dropped from 30/- and 40/- down to 18/- and 20/-. The live weight of a good ten weeks old bonham would be about 50 lbs., and the highest price he had known for this size in the Coleraine market was 44/-. He did not consider that the price of the young pig would have any influence on the weight to which it would be fed, as the people are aware that they will get a lower rate for heavy pork. Where pigs are sold on foot, however, the practice might occasionally be different.

His experience had been that the walls and roof of pig houses are fairly good, but the floors are most unsatisfactory, and lighting and ventilation do not receive sufficient attention. He thought the Department might issue a special leaflet explaining how farmers can make comfortable houses with good floors and advising that an open yard be attached to every pig house. In congested areas assistant overseers should continue still more strongly to advise small holders to utilize the materials at hand for the erection of suitable piggeries. The cement or lime necessary would not be very costly. He did not consider that there is any necessity to grant loans either to small or large farmers for the purpose. The Department might, however, assist in the erection of a few piggeries which would serve as models.

Any scheme of making grants or loans for the improvement of pig houses would probably reach such dimensions that it would be difficult to limit its ap-

plication. Many people have a greater need for assistance in the improvement of their own dwellings. In this connection generally the Parish Committees are doing good work in congested areas. These bodies are usually composed of the leading men of the district and have placed at their disposal by the Congested Districts Board an annual sum of money out of which grants are made to occupiers of holdings, the buildings on which were not provided by the Board, for the improvement of the dwellings or out-buildings. The work must be carried out to the satisfaction of an officer appointed by the Committee. The grant is given outright, and would vary probably from £2 to £3; it is often possible to induce small holders to carry out improvements to the value of almost ten times the amount of the grant. He would suggest that the Congested Districts Board be asked to direct the special attention of Parish Committees to the need that exists for better piggeries, and have the work done by them instead of under a general loan scheme. In many cases it would only be necessary to improve the existing piggeries. Where a farmer wishes himself to erect a pigery it would be advisable to give him oral instruction by some competent person. Plenty of material is available, and if a skilled man and outside, etc., for cement were available it would, he believed, be quite easy to induce a number of people to improve existing piggeries or build new ones without offering them further assistance.

He did not consider that pigs could be graded up from the male side only. If farmers paid as much attention to selecting the very best young sows to breed from as they do in the selection of boars the quality of pigs in the country would soon be first class. Unfortunately many farmers keep for breeding their worst sows, or pigs that will not fatten. It is often not sufficiently realized that sows should not be sent to the boar until six months old, and are well fed and developed; and until seven months old if smaller, and not so well grown.

Breed sows when carrying young would be cheaper fed, less troublesome and healthier, if they had a free run of the fields at any season of the year, with a comfortable house to go into at will. When grass is plentiful in summer they might be fed once daily, and twice daily in winter when grass is scarce. They will do well on meal mixed with raw pulped potatoes; or pulped turnips or mangels, with a little water added. The feed should be stopped for from 12 to 24 hours.

Breeders take care to avoid sending sows to related boars, and owners of the latter change the sows freely, so that so far as he was aware there was very little inbreeding. When buying a young boar out of a cart to keep as a sire he believed that farmers did their best to avoid buying an animal that would be related to any pigs in the locality in which it was to be used. While some inbreeding might take place, it was his opinion that farmers take adequate care to avoid it. The indiscriminate purchase of suckers for breeding purposes was, of course, undesirable.

In the past some farmers have purchased non-pedigree young boars which were subsequently passed by the Royal Ulster Agricultural Society for premium purposes; and then by the Department for premium purposes; he saw one or two such animals in County Down last year.

DUBLIN, 28th January, 1915.

Mr. J. W. Steen—continued.

Mr. J. W. Steen—continued.

No records of the breeding of these animals would be available, and this applied to some extent in the early years after the White Ulster Herd Book had been established; but comparatively few animals are bought in this way, and as the number of herds in Ulster increases any difficulty in this respect will disappear. Generally speaking, any young sows intended for premiums are now obtained from pure bred herds where the sires and dams are registered. He did not think in the past year he had been asked to inspect more than half-dozen boars otherwise than where registered herds were maintained. Before inspecting any boar he insisted always on having pedigrees of the sire and dam. He was in a position to turn up his heels and indicate the breeding of every premium boar sent out, and he took every precaution to ensure that two boars of a similar strain did not go to the same district.

Animals are still being inspected for entry in the Herd Book, and he would not recommend that it be closed for some time, so that as many herds as possible might be brought into the more families and strains entered the less likelihood of close breeding afterwards.

The number of persons now keeping pure bred Ulster herds is too limited, and unless more breeding centres are established there will be a certain amount of in-breeding, and a difficulty in getting a full supply of high class boars. From what he knew, however, of breeders in the north they went to considerable trouble to procure unrelated stock before any herd book was established.

The Large White Ulster is the breed most general over the north. His experience is that the type is improving, but he agreed that it would be desirable to have a committee formed to indicate what the type should be and to select judges for shows. The type should be such as would meet the owners' requirements and breeders should have this object in view.

So far as he could ascertain, as much money is available in these counties for boar premiums as can be usefully allocated. He considered that the proportion of premium to non-premium boars, and the total number of boars to sows, is adequate.

The lack of competition for boar premiums in some counties or districts is principally due to the objection entertained by many persons to having these animals about the place, existing sometimes the keeping of strange sows for one, two or more days. The great majority of those who have been in the habit of keeping either premium or non-premium boars continue to do so, and this fact had to be taken into account when complaints are made as to the value of the premium. At the same time he considered that boar breeders are not making sufficient money to encourage or enable them to buy really first class animals for stock purposes.

In order to raise the standard of pure bred boars and sows and to encourage more men to breed animals of a very high class he submitted that men who are breeding pure bred Large White Ulster boars or sows of other breeds require a better price than they are getting. He recommended that the first year premium be £5 or £6 at the discretion of the County Committee; the second year premium to remain as at present, viz., £3.

Each County Committee might also be left a free hand to fix the fee at a sum not exceeding 2/- per sow for 50 sows, in the case of a first year boar, and 60 sows for a second year boar; the position of the premium holder would in this way be improved.

Under the present system the applicant lodges £2 with the County Secretary; the Department supplies a boar costing £5 and pays freight. At the end of the season the holder gets £3 as balance of the premium, the remaining £2 being stopped to pay for the boar. Thus the applicant has the boar free of cost and carriage paid. If the premium were raised to £6 an alternative scheme would be for the applicant to deposit £2 and the Department to supply a boar costing £4. At the end of the season, if all conditions of the scheme had been fulfilled, the owner of boar might

be paid £2 of the premium, to balance the deposit; and the remaining £4 and the original £2 deposit to make up the cost of boar. In other words, the applicant would get a premium boar free of cost and carriage paid to his nearest station, and the opportunity of improving his position by charging a higher fee.

In his opinion the breeder does not now get a sufficient price for a five or six months old boar to induce him to continue the business or raise the standard of his herd. A number of them have already given up breeding on account of the low price. He agreed that many of the animals sold for premiums would return practically the same amount as cost. £5 would, however, leave the breeder in a much better position. Some of the best animals are sold at shows for £7 and £8. Premium bulls are usually sold by auction and the better class animals bring proportionately higher figures, but once the boar reaches premium standard the Department not as middlemen in supplying the boars and cannot discriminate in the price.

When breeders to receive full value for high class animals and £5 for those over the border line, they would be in a better position. In some counties applicants themselves have been in the habit of selecting from amongst the animals marketed and have paid over £5, but there is little inducement to do so unless the premium is raised. This would also have the effect of raising the standard.

He was not aware that about 30 per cent. of the funds allocated for the Swine Scheme had not been taken up. As regards the amount of money expended out of the funds of County Committees for the Swine Scheme, he desired to point out that if the figures for the different counties were looked into it would probably be found that all the money had been allocated in the first instance, but it might not be spent owing perhaps to the fact that some applicants might have failed to purchase boars, or that for some reason the premium had not been paid. Portion of the balance would also be due to a margin from the allocation which would not be sufficient to pay for another boar, e.g., a balance of £9 would provide for one boar only and leave £4 over. He doubted very much whether an increased premium would induce people who have not been accustomed to the business to keep boars, and he believed that the present number is sufficient, but he wanted to raise the standard. As compared with the owner of an ordinary sow, the purchaser of a premium boar has the animal free, and this should compensate him for the loss of fees and the trouble of keeping records. Were the fee raised the owner would have the premium for the keeping of the records alone. In the great majority of cases the man who has premium boars would keep a boar of some sort, as they had been in the habit of doing so.

Comparing the stallion, bull, and boar, he agreed that the boar leaves most money after it.

He acknowledged that compared with the assistance afforded from County Committees' funds to horses and cattle the £1,487 allowed for boars looked very small. In view of the fact that it is a small industry it would undoubtedly be desirable to have more money set aside for swine. It is an industry on which the small and medium sized farmers should place even greater reliance; this class of farmer till the land and should be encouraged.

Breeders find a difficulty in having empty crates returned at once; occasionally the crates don't come back at all. In cases where boars are supplied through the Department it might perhaps be well to have lodged along with the £5 deposit, the 10/- to be returned to the applicant when the breeder had notified the return of the crate in good order. This sum might not cover the cost, but it would prevent the crate being kept or delayed by the purchaser of the boar.

Sixty-two per cent. of the premium boars are fattened and sold after standing for about 12 months, as otherwise the young sows bred from them in the first year would be sent to another boar; moreover, it would then be too heavy for small sows. He did not see that a workable scheme could be drafted to provide for the exchange of boars after the first season.



DUBLIN, 29th January, 1915.

Mr. J. W. Stoen—continued.

Mr. J. W. Stoen—continued.

He suggested that it would be for the benefit of breeding generally if the Department could purchase a limited number of high class boars that had left superior stock and have them available to locate on reasonable terms with breeders who could use them for pure bred sows. He anticipated that breeders would be anxious to obtain such animals of a distinct strain to suit their sows. This should help to raise the standard.

He did not consider that the establishment of more herds would result in a greater proportion of boars offered for premiums being rejected but rather in raising the standard and inducing breeders to make a closer selection. When he first started the work more boars were rejected, but he endeavoured to educate the breeders to the type wanted and urged them not to retain as boars any not likely to be approved. Those breeders now rarely hold over a boar that is not accepted. Of course if the supply were greater he would make it known that the standard required would be higher. He did not consider there was any grievance in this matter, as with the exercise of a little discrimination there should practically be no hardship.

An inspection at three months could be provided only as he would not care to pass a boar finally before it had reached five months. If the animals were selected earlier he could not depend on the breeders to maintain them as he would wish until the boars went out. The second visit would take up a considerable amount of the Inspector's time.

He suggested that the Department might issue a useful statement to breeders of pure bred boars informing them of the months when there is the least and the greatest demand for premium boars. There is little or no demand during the four months of June, July, August, and September; the demand is limited during the three months of October, November, and December. The greatest demand is during the three months of January, February, and March; there is a limited demand during the two months of April and May. If there is a full supply of suitable boars of five to six months old during January, February, and March the demand in April and May would be small.

One circular letter would probably not sell the whole country, as he believed that in the south and west more boars can be placed out earlier in the autumn.

Ireland's contribution of live and dead pork to British markets is a big trade, but this country can and should produce more pigs and secure a still larger share of that market. This can only be done either by additional tillage or the purchase of more imported foodstuffs. Pigs are raised mainly by small holders who could raise a much greater proportion of the pig feeding on their own land. Owing to the limited quantities of corn and potatoes which they can market they don't get highest prices, and as they buy feeding stuffs in small quantities and at retail prices the cost is greater. The best market small farmers can have for home grown produce is in the form of pork.

During the period 1904-1913 Ireland imported bacon in value varying from over £1 million to £2 million each year. A number of years ago when American bacon was sold at a cheap rate in comparison to Irish this was not bad trading, but now that American is selling at nearer the price of Irish it is obviously advantageous to use more home grown bacon.

The chief foreign exporting countries to the United Kingdom of pig products (i.e., bacon, hams, and pork, frozen and fresh) are the United States of America, Denmark, Canada, Holland. These four countries supply nearly 90 per cent. of the total, the balance coming from Russia, Sweden (mainly ham), and Belgium (fresh pork). The total quantity of bacon, etc., received from America in 1905 was 3,085,849 cwt.; in 1909 it had fallen off to 2,390,877; in 1910 the supply shrank materially to 1,678,760 cwt.; the following year, 1911, a partial rise to 2,708,257 was noticeable; since then the fall in supplies from this source has been continued, and in 1914 only 2,202,374 cwt. were exported—the lowest quantity since 1910. On the other hand, Denmark, except for a temporary drop in 1909 and 1910, has been maintaining a steadily increasing output. The bacon export in 1905 was

1,509,530; in 1908 it had risen to 2,071,884 cwt., in 1912 to 2,346,151 cwt., and in 1914 reached the maximum output of 2,714,807 cwt. The exports of bacon, etc., from Canada has fallen off by nearly 80 per cent. in the period 1905-1914. In the former year the export to the United Kingdom was 1,493,582 cwt., whereas in 1914 the total supplies received reached only 491,371 cwt. The export of fresh pork from Holland has almost doubled itself in the last decade, having risen from 324,143 cwt. in 1905 to 645,749 cwt. in 1913.

The export of bacon, hams, and pork from Ireland rose from 683,767 cwt. in 1905 to 1,110,351 cwt. in 1908; this total was not quite reached in 1909 and 1910, but in 1912, owing to the restrictions on the shipping of live pigs, the bacon export rose to a maximum of 1,594,885 cwt., but in 1913 fell back to a normal export of 1,179,841 cwt. Taking the total sources of foreign supply in the latter year the quantities from outside countries reached 6,207,149 cwt., so that Ireland contributes slightly more than one-fifth of the bacon and ham supplies of the United Kingdom.

In point of value the American exports have fallen from £10,995,720 in 1907 to £6,785,637 in 1910—a year of exceptionally low shipments as mentioned above; the sharp recovery in volume the next three years, though dwindling from 3,709,287 cwt. in 1911 to 2,602,374 cwt. in 1913, has been more than counteracted by the steady rise in value—hence the trade which was worth £7,786,144 in 1911 rose to a total value of £8,872,516 in 1913. The steady rise in the value of the Danish export trade is very marked; thus from a value of £4,138,090 in 1905 it had risen to £5,734,096 in 1911; in 1912 it surpassed for the first time the American trade in value, and in 1913 again held premier position with £8,888,701. Canada in the same period shows a steady shrinkage in the value of trade, which from a total of £3,477,800 in 1905 fell away to £1,199,894 in 1913. The total value of Irish exports, including live pigs, has risen from £2,913,454 in 1905 to £5,497,755 in 1913, and in this respect constitutes one-fourth of the total trade.

A summary table\* is given showing quantities and values of pork, bacon, and hams exported from Ireland for ten years, 1904 to 1913, inclusive.

In 1911 the value of dead and live pigs indicates a falling off in the quantity of Irish pork in that year, but taking the table of quantities there was a larger export of dead pork and also a larger number of live pigs shipped in 1911 than in 1910; the explanation is that pork was 60/8 per cwt. in 1910 and only 52/- in 1911.

Mr. J. WILLINGTON, J.P., St. Kierans, Bhr.,  
Member of Committee.

Mr. Willington, a farmer and breeder and feeder of pigs, stated he had been engaged for upwards of 17 years in the raising of pure bred pigs, and had extensive experience as a feeder. In the beginning he tried the Tamworth breed, but owing to the poor return in weight for the food consumed and the slowness with which they matured he gave them up. He had since bred large Yorks. Sometimes afterwards the bacon curers introduced their scheme for the placing out of good class boars. These were bought from breeders at about three months old at 23, and cures were supplied in which three or four could be sent at a time. The animals were then maintained at a depot in Limerick until fit to go to farmers. Pedigrees were not asked for. A good many of his boars were disposed of in this way. He considered that the price which he received from the curers paid him better than that now obtained from the Department for boars marked for premiums. He instanced the case of a litter of eight pigs, farrowed in June, 1914; eight of them were boars and were accepted by the Department at 25 each; only a few days ago he had received instructions to send out the last of them and some of these boars were 3½ cwt. The remaining four, sows,

\* See Appendix VII., page 157.

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Mr. J. Willington, J.P.—continued.

Mr. J. Willington, J.P.—continued.

were sold for pork on 15th January, and at 45/- per cwt. live weight had averaged 110 to 120 lbs. 104. All the pigs were given the same treatment and feeding, and it would therefore be seen that instead of being compensated for the extra bother involved in writing out pedigrees, etc., he was actually at a loss. Had these animals been consigned he considered they would have made more weight than the sows and have been worth about 7/6 each extra. In the spring of 1913 he sold a number of boars for premiums; others from the same litter when castrated and fattened returned 65/10s. as compared with 25/ for the premium animals. When boars come to four months old he usually found it necessary to provide separate accommodation for them, and this entailed the provision of additional housing. There were various other details that had to be attended to with breeding stock as distinct from store or finishing animals.

The understanding is that the Department take boars at five months old, but his experience had been that the animals are nearly six and occasionally eight months by the time he receives forwarding instructions. Some of them would be approaching 2 to 3 cwt. If the breeder could rely on receiving 20/ for the boar at 5½ months old the business would just pay, but nothing more.

The number of pure bred animals sold in this country for breeding purposes as distinct from the premium boars is very limited, as the larger breeders who are looking for high class stock go to the other side. If the standard of the herds is to be maintained or improved the breeder is obliged to bring in fresh blood, for which he has to pay good prices. Owners of premium boars are deriving the benefit in the animals supplied to them; and this fact should be taken into account when the Department fix the price at which the animals are taken. If the prices of pork and feeding stuffs reverted to former figures, 20/ might be reasonable, but if existing conditions were to prevail he would have to consider the advisability of marketing all his pigs for bacon. He did not consider that at present prices 20/ would be sufficient to repay for the amount of clerical work and the trouble entailed in getting back crates, wear and tear on same, etc.

In the foregoing remarks he was expressing the views of a number of breeders whose opinions he had been able to ascertain.

Under present conditions if the breeder can get 27 or 28 otherwise he will not sell the sows to the Department, but there is not much outside demand. He anticipated a big demand for pedigree stock after the war and had been preparing for a foreign trade for some time. He had seen boars sold for export at 240 which he considered were not so good as those he had been selling to the Department at 25. If the foreign buyers could be brought over here he believed they would be willing to pay good prices. The Department now get the choice of a whole litter.

In the case of boars sent out to the Department's order he thought it only fair that they should guarantee the return of the crate in proper condition and that any damage would be made good. Ten shillings would not pay for a crate. The actual cost would now amount to nearly 15/.

The Department breed a large number of boars on their own farms, and until they get rid of these they will not go to private breeders. He had seen boars sent out—he did not wish to say where they came from—that did not reach the standard required from him. It offered by him he believed they would have been rejected.

He knew that some of the boars marked when five months old would look different at six. The best pigs in a litter, however, usually keep so. He had pigs rejected by the Department after five months, but even when castrated he had a fair market for them. The quality of the pig was not taken into consideration, and he was cut for overweight only.

In the event of a boar going wrong with the premium holder he did not think the breeder should be asked to make any allowance. It often happens that the animal receives considerable hardship in going a

long distance to the new owner and the subsequent treatment may not be satisfactory; the breeder should not be held responsible if the boar suffered in consequence. He had not, however, received any such application in recent years. He had never heard of a boar proving unfruitful, though if it did he hardly thought the breeder should be asked to accept any responsibility.

The effects of an outbreak of swine fever are serious to the owner of a herd of pure bred animals. If the disease is to be stamped out it is desirable that all the pigs be slaughtered, and this he understood to be the policy of the Department when they are in a position to do so. The amount of compensation, however, is limited, and is based on the value of the animal for pork. He thought the scale had been fixed when pigs were much cheaper and that it should now be revised. Slaughter should be compulsory, and premium should also be made to pay the market value of pigs killed; the fact that the breeder might have paid 250 for a good sow should be taken into account; 25 is now the highest price that can be allowed for any pig, no matter how good.

In his part of the country when landrains are dear the tendency is to make the pigs overweight. The prices at which young pigs were bought in 1914 represented 25 per cent. The small breeders must have a pig of some sort, and they hold on the animal until it reaches a big weight; they believe that although it returns a lower rate per cwt. more money is got out of it. This practice might well be adopted when the boars are very dear, as before here to be bought and the daily gain is bigger after the pig reaches 2 cwt., with a very slight additional quantity of food, up to 2½ cwt. provided the animal has been consistently fed. Pigs run out on the grass and put in after the summer cut a great deal more than if fed all the time; these animals are marketed at eight or nine months old and would be about 1½ cwt. dead weight. It is more profitable to feed two or three lots in the year.

He had found *Spratt barley* a very economical food for pigs; it will do on bog or moor land that will not grow oats; it stands up well and gives a good yield. Off bog land it will give a better return than the ordinary barley on ordinary land. The average return from the barley crop had been perhaps 12 to 14 barrels; with the newer varieties 16 to 20 per Irish acre might be expected, whilst he had got upwards of 30 barrels of *Spratt* from an Irish acre. This variety, however, is not suitable for mowing; it is a feeding barley only. The attention of the agricultural community in the poorer districts who are accustomed to feed pigs should be directed to this barley owing to its suitability for bog land.

In connection with the improvement of pig houses he suggested the use of concrete made with breeze when putting in the floors. It is much warmer than the ordinary concrete; and sheds damp, and pigs do better on it.

Mr. M. K. ROCHE, J.P., Managing Director, Messrs. P. Kahoe & Co., Wholesale Provision Merchants, 103 Francis Street, Dublin.

Mr. Roche stated he had been under the impression that pig rearing was on the decline in Ireland, and the reason he attributed for this was the prosperity of the agricultural community owing to the operation of the Land Purchase Acts. This placed the wife and daughter of the farmer beyond the drudgery of pig rearing—as it was known in the past. The figures now presented to him, indicating that the industry had been maintained for the past ten years, excepting 1913, upset his preconceived view of the matter.

Compared with ten or fifteen years ago, pork has been selling at a considerably enhanced price; and while this should have encouraged pig rearing on a much larger scale, it did not appear to have done so.

He was a south of Ireland man, and in his native place in North Tipperary—he was aware that part of Tipperary was a tillage area—he knew one farmer who

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Mr. M. K. Roche, J.P.—continued.

formerly kept 100 pigs who now had two only. The reason given was the difficulty and cost of obtaining labour for this work. This trouble had been accentuated by the tide of emigration. He agreed, however, that those who keep pigs are principally the small holders, who are practically independent of outside help. His estimate referred to the farmer with 50 to 70 acres. Women have a strong objection to pig feeding. During a visit to Bandarra, a district comprising a considerable number of small holdings, he had been surprised, on making inquiries, to find that not a single pig was kept in the parish, and that if it were known that any farmer had pigs he could not get a domestic servant to enter his employment. He was told, however, that greater numbers of poultry are kept, and that they were more remunerative; this might be one of the reasons. Nevertheless the profit from pig feeding during the last few years should have been very satisfactory. Some of the people keeping poultry had no village at all.

Much of the labour trouble would be obviated if farmers were admitted to the advantage of live food and the use of pulped waste mixed with Indian meal or grain of any kind, the latter if necessary being steeped in hot water. Nearly fifty pigs could be fed in this way with the amount of labour and time now required for two. While the cost of labour is an important factor, the increased price of Indian meal has also had a good deal to do with the number of pigs fed. Indian meal constitutes a large proportion of the pig feeding, but farmers would probably find it better and cheaper to buy bruised Indian corn and use it after being steeped in hot water.

Owing to the present abnormal prices for feeding he anticipated a shortage of pigs in the near future. Thousands of young pigs were offered in Counties fair the other day, but very few were bought; the remainder had to be taken home. Of course they would be fed by someone, but every possible opportunity would be taken to get rid of them. Many would probably be shipped to London for fresh pork. From what he heard he thought a number of the sows would be fattened off. He did not consider that he could offer any practical suggestion to prevent a shrinkage in pig numbers. Farmers might, however, be notified that beef will be scarce and dear for a few years to come and that in view of the prospective scarcity of meat generally pork would undoubtedly bring a high price; that consequently it would not be advisable to deplete breeding stocks. He agreed that the Department would be justified in sending a circular to pig breeders and fatteners throughout Ireland indicating that pork would certainly be dearer shortly and would command a higher price. London takes a big number of young pigs when there is a big margin to the consumer between the prices of pork and beef. In fact the demand in London for pork is always good. The cheaper food will generally be used. When bacon is very dear the people turn to something else.

American supplies had been increasing for the past three years, and especially during the past year. Of course, shipments are not equal to what they were, say, fifteen years ago. The meat is now consumed in America itself, and the tendency would be to export less, though it would be a considerable time before the import of American bacon stops altogether. The marketing of pigs will go on in America next month owing to the high price for meat. It is paying the farmer three better to sell the corn than to give it to pigs. This will make the American stuff cheap for a time, and be anticipated a big supply of American bacon shortly. That day's prices in Chicago for Indian meal and pigs had been respectively 68s. the bushel and 4.75 dollars per 100 lb. From a rough calculation that meant pigs at the same price as maize. About 20 bushels of corn are required to make 100 lbs. of pork, with the result that the farmer would lose about 1 cent. per lb. if the maize were fed to pigs. It has frequently occurred on a failure of the corn crop in America that the pigs were killed off, with a consequent shrinkage later. The high price of beef in America also has thrown the consumption on to pork. Had beef been normal the price of American bacon would have been more reasonable. Owing to the high price of beef an enormous quantity of lard

Mr. M. K. Roche, J.P.—continued.

pork was used in America and the bellies shipped to the United Kingdom. He believed that next month prices will probably be lower, and about August of the current year may be up by 50 per cent.

From the information he had gathered about Denmark he believed that the high cost of feeding had resulted in the killing of pigs in large numbers, and possibly some of the stuff was going to Germany. Danish lard which was selling in Liverpool at 43/- per cwt. before the war was a month ago realising 85/- in Copenhagen, and this might be due to the heavy demand from Germany. A good deal of lard was shipped from America to Copenhagen and probably sent thence to Germany.

Mr. WILLIAM DWYER, of Messrs. O'Neill & Dwyer, Provision Merchants, Lower Bagin Street, Dublin.

Mr. Dwyer stated he had forty years' experience in Dublin in the retailing of bacon and hams.

The quotation for green bacon in London market does not in this country affect retail prices. He acknowledged that in London the price received by the carter fluctuates every week according to supply and demand. In Ireland it is quite different. The price charged by the carter here has no relation to that in London. The four carners in Limerick fix a central price at which they give supplies to the provision trade here, and this is not altered more than four times in the year. The cost to the retailer or consumer thereafter does not vary until the carners decide to alter their wholesale price. Irrespective of the price he has to pay for pork, the carter will maintain the price to the retailer for a certain period. Only one firm, O'Meara's, sends bacon direct to the provision dealers in Dublin, both green and smoked. The bulk of the stuff comes to dryers in Dublin, from whom the retailers obtain it. In either case the price is relatively the same. The drying trade is in the hands of four or five men, who add a certain amount to the figure for green bacon, and they all make the price uniform. These dryers buy the bacon also at a uniform figure, and their prices vary only as do those of the carners. The market in Dublin is not regulated as it should be; the system is not a good one. The same applies to other towns in the country, with perhaps the exception of Belfast.

Long sides are not generally sold in the south or in Dublin. The price is ruled week by week according to the London market, but owing to the small quantity used here the effect is not appreciable. The present retail price for Limerick smoked middles is 102/-; the price is the same from any of the carners. These middles are the Limerick sides with the bone and gam taken off. He had repeatedly bought Limerick middles in Liverpool at 6/- per cwt. cheaper than he could obtain them in Dublin.

Bacon is so mild cured that the retail provision trade buy from week to week only. Merchants will not make any contract or quote in advance. It is not customary for the retailer to vary the price to the consumer less than 1d. per lb. Bacon had recently gone up 4/- per cwt., but as that did not represent 1d. the cost to the consumer remains the same, so that the retailer is out of pocket in this extent. If it comes down the retailer would pick up this loss. At some times happens that the retailer is selling almost at a loss; at other times he has a fair profit. The confidence of the public would be completely destroyed if the retailer was to be constantly changing his price. There must be some means of levelling up the position.

For the past few years the retailer had practically no profit on the sale of bacon. He was paying 104/- for Limerick bacon. He sold the best parts at 1/8, and this looked big; some of it is sold at 1/-, but the rougher parts had to be disposed of at from 1d. to 10d. When this reduced price was taken into account and also the wastage due to selling in small quantities, the margin was very small. With the bacon alone the bacon can be cut up much more economically. A number of the larger houses try to sell the whole middle at a uniform figure and the person purchasing in this way is able to save 1d. to 1d. per lb.

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Mr. William Dwyer—continued.

Mr. William Dwyer—continued.

Pork is now 68/-, Limerick green bacon 86/-, and, when smoked, 4/- extra; this would be for the whole side. Some years ago he was told by a curer that 20/- led a profit for the curing. He agreed that the dealer the pork the greater the margin required by the curer for the better parts of the bacon, and that while the official appreciation in value it did not do so to the same extent as the bacon, and that the curer has to pay higher for the labour involved. At the same time he considered that the discrepancy between the prices of pork and bacon was more than necessary. The heads are sold at 32/-; kidneys, each weighing about 4 ounces, 1/6 per doz.; the backbone at about 24/-; the crabs are sold about 24/-; the loin steaks are retailed at 1/-. Last December pork was 65/-; green Wiltshire, 75/- to 80/-, and he would not be surprised to learn that at that time the curer was working at a loss.

When he first became acquainted with the trade bacon was a better keeping commodity. For the past twenty years the taste has been for mild cured, but during that period there has been little change. Some of the fluctuations may be due to its perishable character.

When properly handled Limerick bacon is the best; maintains the highest position in public favour, and commands the highest price; after it comes Danish, and then American. Of late years the Danish is practically equal to the Irish; it is very uniform both as regards quality and size. Were it not for the war the Danish trade would probably have developed to proportions that would have interfered more seriously with the Irish; at 14/- per lb. cheaper it would be taken in preference to the latter. The objection to it now is more sentimental. Danish comes to Dublin smoked and is almost as dear as the Irish. Since American and Canadian bacon comes and dear the Irish is gaining a greater hold in this country, and he believed it was only a matter of time until no more American or Canadian bacon would come over. Denmark will be the future competitor of Ireland. The American trade is greatly reduced; the quality is lower than

formerly and distinctly inferior to Danish; it is used much more in the country districts than in Dublin. American is not valued for within 2d. per lb. of Irish; the difference is evident in the cooking. It does not compete with either Danish or Irish, but goes to people who look for a cheaper article.

One of the mistakes which the Irish farmer has been making for years is the selling of his own and the buying of American bacon.

Wiltshire bacon is not taken owing to the proportion of corner meat; too much shoulder is left on it. The ham cut around in the Limerick style and sold separately is preferred.

In the higher class trade in Dublin the same quantity of Limerick bacon continues to be sold irrespective of price. It is amongst the working classes only that people turn to something else when bacon is dear.

The northern curers do not look for a trade in Dublin, and with the exception of a few rolls he did not think any of it came here. The Dublin public do not take to this bacon. Dublin is the dumping ground for heads both from the north and south. Limerick heads are better than those from the north, as is also the appearance; they are treated differently. The tongue is taken out in the north and cured separately; the head is consequently sold cheaper. The singed head is not popular; it comes from Denmark only. The Limerick curer scalds the head for Dublin and singes it for London.

He was under the impression that foreign pork and heads are shipped direct to Dublin and that there is no inspection at Irish ports. The stuff, of course, is cured.

Pig feeding is only looked upon as an adjunct to farming, and he thought it should pay well if the business were regularly taken up, as the prospects for the industry appear to be satisfactory.

He considered that the sanitary regulations in the City, though necessary, are too stringently enforced. He thought that pig sties might also be added to cottages near the City.

## TWENTY-FIFTH PUBLIC SITTING.

FRIDAY, 29TH JANUARY, 1915.

AT 10 O'CLOCK, A.M.

At the Offices of the Department of Agriculture, 4, Upper Merrion Street, Dublin.

### PRESENT:

Mr. JAMES S. GORDON, F.R.C. (Chairman).  
Mr. R. N. BOND.  
Mr. STEPHEN O'MARA.

Mr. PATRICK CLOWE.  
Mr. J. WILKINSON, J.P.  
Mr. O. W. H. BOLSTON, F.R.C.

Mr. J. T. BYRNE, Cherrywood, Loughlinstown, Co. Dublin.

Mr. J. T. Byrne—continued.

Mr. Byrne, representing the Dublin County Committee of Agriculture, stated he was a farmer, and breeder and feeder of pigs. He concurred in the statement of the figures set aside by the Dublin Committee, viz., the total of £647 paid by the Department, and its apportionment by the Committee as follows:—Horses, £390; cattle, £240; swine, £17. With the latter allocation three premiums were provided for boars. The Committee had been in the habit of providing for five, but had to reduce the allocation to prevent the money being looked up from other schemes. The total number of boars in the county was 36; he did not know how many of these would be sires at the Albert Agricultural College, Glasnevin; and the number of sows, 700. The Committee

appreciated the value of the industry and would set aside more money were applications forthcoming, but so far the swine scheme had been a failure in the county. The Committee had for years drawn the attention of the Department to the inadequacy of the premium in view of the conditions prevailing in the county. With rare exceptions persons who have held premium boars will not take them again. Those people had given the matter a trial, some of them against their own inclination. It was becoming increasingly difficult to get servants to look after boars or pigs; moreover, larger farmers do not keep pigs for the reason that they can probably make more from the farm by the sale of produce. Plenty of refuse, however, is available which should properly be utilized for pig feeding. Pigs are not kept by the smaller

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Mr. J. T. Byrne—continued.

holders, even though the latter are not dependent on outside help; some of them would undoubtedly have borne it if they considered the business profitable.

The smaller farmers who feed pigs are mostly in South County Dublin, bordering upon Wicklow. He agreed that there were in other parts of the county a number of very good boars and that the area in which premium animals would be required is limited. The development of the industry in the county was not necessarily dependent on the location of premium boars. In districts of South Dublin it might be useful to have more premium animals; two of the three now located are rather close together, and a few districts that require it have no premium boar. He had no doubt that at present sows have frequently to be brought a considerable distance, and when they arrive are not always in a fit condition to be put to the boar, so that it has to be maintained for a few days. This is the objection of the sire owner.

He did not consider that even in view of the small number of sows an increase in the number of boars beyond 36 would create any difficulty, as the fee for the premium animal is 1/- only, as against 5/- to 10/- for the ordinary sire. He personally thought the fee for the premium animal should be raised to 2/- or 3/6, but the Committee were not unanimous on the point, as some of the members fear it would have the effect of making poorer persons send sows to inferior boars. Some nondescript animals are given for practically nothing. His view was that no ordinary boar could be maintained if the fee were above that 2/-, and that the charge for the premium animal should not be less. The man who keeps a boar without a premium must have some special reason for doing so. There are people who have a fancy for keeping boars of their own breeding and selling some of the stock as pedigree animals. The remainder of the boars would be nondescript, and should be replaced with premium sires. This could be done without having a large number in the county, but to do so it would be necessary to raise the fee and improve the premium. He suggested £10, and in doing so pointed out that Dublin could not be compared with other counties. £5 might be considered substantial in the west, while in Dublin it would not count at all. Resolutions were introduced to the Department requesting that the premium be raised to £7 10s. in the hope that the Department might be induced to agree to this figure, though at the same time the Committee were quite satisfied that £10 would be necessary. He saw no reason for reducing the boar premium in the second year; that for the bull is the same each year. The Department had not so far recognized the difficulties of the Committee in this connection. In these matters he thought the views of the county bodies should receive greater consideration.

He recognized that any additional assistance to the swine scheme would entail a reduction of the amounts available for horses and cattle. He personally would take it from horses, but in making this suggestion he was not to be regarded as expressing the opinion of the Committee. His reason for taking the money from horses was that some of the mares receiving nominations are hardly up to a suitable standard. He would be slow to interfere with the cattle scheme as he thought the premium bulls submitted were giving excellent results. He agreed that relatively the initial costs of the bull and boar are very different and that raising the premium for the latter to £10 would make the subsidy to the two sires apparently still more disproportionate. He would not, however, be prepared to regard the matter in this light. He would not take the cost of the boar at all into account, but rather the importance of the industry. The holder of a premium bull pays the premium for three years to the amount of £45. He may have 25 or 30 sows of his own, and finds the bull very useful to meet his own requirements. No boar owner has so many sows, consequently more outside animals are coming to his place. He must be given some monetary consideration to repay him for this. The risk of swine fever restrictions prevents a number of people from having boars, and a number of sows coming in increase the danger. Some members of the Committee are anxious

Mr. J. T. Byrne—continued.

to have the White Under sow introduced into the county; he had been told that the Under sowed with the York gives excellent results.

The sanitary regulations in regard to the keeping of pigs apply not only to the city but to the county town as well. He acknowledged that these regulations are quite necessary, but in some cases they are too stringently enforced. He thought they might be administered in a more liberal spirit so as to allow of pigs being kept under proper conditions. The difficulty had been to comply with the regulation which required pigs to be kept a certain distance from the dwellinghouse, 80 yards he thought; the industry had accordingly to go.

Mr. STEPHEN O'MARA, Member, O'Mara, Ltd., Bacon Curers, Limerick, Member of the Committee.

Mr. O'Mara stated that after being cured bacon does not usually keep for more than about a fortnight and in summer should be sold within three or four days of being marketed. It was infrequently happens that bacon for which in the early part of the week 70/- can be got may have to be sold for 60/- at the end of the week. It is not the practice to place bacon in cold store when a satisfactory price cannot be obtained for it. Whilst it did not appreciably interfere with the quality of beef or mutton, cold storage deprives bacon of its fine mild cured flavour, so that it is very difficult to get buyers to take the bacon if they know it has been kept over in this way.

The Danish bacon keeps about the same length of time as Irish, i.e., about eight days, or three days after being marketed. It can be put on the market as soon as the Irish. American bacon is mild cured also, but it is packed in boxes—a chemical preservative which is not used by Irish curers—so that it keeps almost indefinitely.

The trades of the northern and southern curers are distinct, the pigs being bought dead in the north and alive in the south. In the former case the offal appears to be returned by the farder, and he had been surprised to learn the extent to which apparently no return was obtained from the offal. He considered this to be a great loss to the province and to the country generally. He had found the offal (or "fall") from such pig to be worth 5/6 to 4/-. Presuming that half million pigs are killed annually in Ulster that meant practically a loss of £1000,000. To the southern curer the return from the offal means more than the difference between profit and loss. He had no hesitation in saying that the carcass itself never makes the first cost, and that the profit lies in the offal. From what he had heard there was no doubt, of course, that portion of the offal, such as the heart and liver, is used for horse consumption, but it appeared to be quite evident that a very large proportion of it went completely to loss.

The north of Ireland pig is not suitable for the southern trade. It had a finer skin and less hair. He might mention that there is a regular demand for the hair from the curing factories, and when dried it is sold at £20 per ton; of course, this hair costs something when the pig is bought by live weight. No portion of the pig goes to waste in the southern curing factory.

He considered that the prospects for pig breeders and farders in the immediate future were exceptionally promising, and that pork is likely to rise to a price which the farmer has never before received. It would, therefore, be a great mistake to kill off or reduce breeding stocks. Although some evidence had been forthcoming that farmers are decreasing the number of their pigs, he thought they were beginning to realize that that policy was a mistake.

He believed that the subsequent outlook for the farmer is also encouraging. The population of the United States is growing at the rate of one million annually, and the pig numbers there are not being maintained. If this state of affairs is to continue it is obvious that in the course of time America would require all its own

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Mr. Stephen O'Mara—continued.

Mr. Stephen O'Mara—continued.

produce. Years ago they were exporting large quantities of butter and cheese; all this is now consumed at home. An important factor regulating the output of pigs in America is the area under corn, and this has not been increasing. At present there is no prospect of an increased pig population in America. The American farmer is getting an equivalent of 30/- per cwt. live weight for pork and 8/- for mutton, with the result that the latter is being sold off instead of being fed to pigs. This was repeating the experience of 1911, which was followed by two scarce and dear years for bacon. Next year American bacon promises to be scarce.

Since 1910 the imports of American bacon into the United Kingdom showed an upward tendency, but his impression had been that this was due to the high price for pork. The supply from America, however, is not large. He remembered weekly arrivals in Liverpool to be 25 and 30 thousand hams; they now average less than five thousand, and eventually he thought there would be none. When the big shipments were coming over the bacon was sold at about 40/-; the same rate is now reaching 70/-.

From his knowledge of Denmark he was inclined to think that the supply from that country placed on British markets would go up for a while and that it would later be reduced. He thought it unlikely that any quantity of Danish pork was at the present time being diverted from British to other markets, even temporarily. From inquiries he had made he believed that it was all coming to England and that none of it was going to Germany. Feeders in Denmark were to a large extent dependent upon feeding stuffs which they imported, a considerable quantity being obtained from Russia; that supply is now closed to them with the exception of a limited quantity from Sweden, and they have no other food for the country so full back upon. In consequence the Danes are depopulating their breeding stock. In fact he had information which indicated that Danish pigs, including breeding stock, were being slaughtered in large numbers. (He referred to recent published articles which confirmed this view.)

If Danish and American stocks are reduced it will take at least three years to bring up the numbers to normal, so that England will be dependent on this country for supplies of pork for the next year or two; accordingly there is a great prospect for the industry in Ireland.

In order to conserve food supplies in Germany for the large population of the country, pigs are being killed off and the bacon preserved for consumption later. If the war were over it will take two or three years to make up that wastage.

If the Irish farmer, therefore, will only till the land and raise more produce for pig feeding he had a great outlook and should find pigs pay well for some years to come. The demand in England alone should be immense in the coming year.

He certainly thought steps should be taken to advise farmers as far as possible of the prospects for the industry and recommend them to increase their stocks of pigs. At the same time it was most desirable that the increase should be gradual, otherwise it would probably upset prices. The market cannot be created at once, and if the increase be violent other outlets must be found which might not be so satisfactory. A shortage of Continental supplies, however, would mean that England should be able to take any increase from Ireland. In any case the increase here must be gradual as pigs cannot be bred immediately. His experience led him to believe that any sudden increase in the number of pigs raised by the Irish farmer was most improbable. About one-fifth only of the pork on British markets comes from Ireland, so that an increase of 20 per cent. in pigs exported from this country would represent 4 per cent. only on the market in Great Britain, and this additional quantity would not make any appreciable difference.

This year had been the most plentiful that cures have been; nevertheless the South of Ireland factory capacity would be equal to 50 per cent. more.

He did not quite agree with the statement made by Mr. Dwyer that the price of smoked middles was

varied four times only in the year. Whilst the price of middles and hams is kept as steady as possible they must necessarily fluctuate fairly frequently. As distinct from their position on the English markets, Irish cures are in a position to control the home trade, and they made it a point to maintain the price for bacon sold in this country as uniform as practicable. Retailers could not think of reducing or increasing the price of bacon in sympathy with every rise and fall in the wholesale market; they could not keep their customers if they were to do so. The practice in the retail business is not to alter the price less than 3d. per lb. to the consumer.

It is not generally known that the Irish trade represents less than one-fifth of the Irish cures' business. Four out of every five pigs killed in Ireland go to the other side. The numbers in the previous week as regards live and dressed were seven to one.

The price obtained by cures on the London market is regulated by foreign supplies, and the fluctuations were caused by the keen competition on that market. The result is that the price which may be given in this country for pigs on Monday does not always remain the same during the week. In his opinion, however, it should be the endeavour of the cures to keep it constant. It would give the farmer more confidence if the opening price on Monday could be made to last for the week at least. The farmer who brings to his pig on Monday gets 60/-; his neighbour on Tuesday gets 63/-; that causes bitterness and disappointment. He expressed the view that it was up to the merchants to meet the farmer so far as they can, because any feeling of lack of confidence is bad for the farmer as well as for the merchant.

The price of pigs depends more on competition than anything else, and this accounts for the discrepancies in price at different centres. Where two scales are competing, 1/- and 2/- may be paid more than where one scale only is located. It is purely a question of competition, and he knew of localities where the difference amounted to 3/-. Further competition would be provided by the holding of a fair on the day on which pigs were brought on the scales. The men going to the scales get their instructions one or two days before. The prices in Tullamore and Pterlington on the same day, to which reference had been made, would be due to the competition in those places. Unfortunately the question of quality cannot be taken into consideration.

In regard to the statements that had been made as to a ring amongst buyers to arrange prices and that the buyers were responsible for the fluctuations, he had no hesitation in saying that no ring exists: there is not and never had been in his memory any understanding between them; there is not even a friendly feeling amongst them.

Mr. JAMES MCCLANTRY, Midweek Malloy, Co. Clare.

Mr. McClantry, representing Clare County Committee of Agriculture, stated he was a farmer and breeder and feeder of pigs. He mentioned that £700 was provided for live stock in the county, out of which the Committee allocated for horses £400, cattle £300, and swine £20. The last mentioned sum was sufficient for 11 premiums, viz., 7 first year and 4 second year. The assistance to swine is, however, supplemented in the congested districts of Clare by the Department, with the result that the number of premium hogs had been brought up to 20 or 21 out of a total of 33. Some numbered 4,711; the industry, therefore, appeared to be fairly well provided for.

There is not the slightest difficulty in obtaining applicants, and he was confident that if the Committee set aside additional funds more hogs could readily be placed out. He would be in favour of doing so, but not if the money had to be taken from horses or cattle. The Committee had not gone into any figures relating to the values of the different classes of live stock to the county. He did not think horses were worth so much as pigs, and for this reason he thought the latter were entitled to more consideration. No complaints had been received as to the value of

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Mr. James McGee—continued.

the premium. The ordinary fee is 2/- to 3/6. So far as he was aware no representations had been made to have the charge for the premium bear increased. He preferred to leave it at 1/- to induce farmers to bring sows to the premium house. He agreed that Cane has a fair pig population and that the industry receives a considerable amount of attention. The Committee comprises 30 or 35 members, mainly farmers, most of whom breed and feed pigs. The breeders and feeders are generally small holders, but pig feeding is general. Most of the small holders breed as well as feed. Labour is a factor on the larger farms only, where it is difficult to get pigs attended to.

In his part of the county it has been usual to market pigs at nine to twelve months old, when they would be about 2 cwt. Some are brought at about ten weeks, and fed seven or eight months after, when they return 45 to 48. They are carried on as stores and allowed to run out on pasture during the summer, and then finished when potatoes are available. The tendency, however, is for this custom to change, as it is considered more profitable to feed two or three lots in the year. The price is more satisfactory than for overweight pigs. The feeding is almost entirely on potatoes together with meal and milk. The extent of the potato crop therefore influences the number of pigs fed in the year.

People seem satisfied with the marketing. In addition to the fairs and sales, agents send pigs direct to the curer. The method of selling in fairs is most favoured, as feeders consider there is good competition between dealers, sales, and curers' agents. The highest price is sometimes given by dealers buying against the sales; this would, however, be in the case of the heavier pigs.

Those feeding pigs are inclined to turn to cattle or poultry when either of the latter is paying well, and this is the case at present. A number of people who formerly kept pigs are now turning to poultry owing to the increased return from eggs; but in the rural districts pigs are kept as well. Formerly pigs were kept generally in the towns, in some huts or coonies, but the sanitary regulations now require that they shall be at a certain distance from the dwellinghouse. In consequence a number of pig feeders had to get out of the business. He would not say that the sanitary regulations are too rigidly administered, but a number of people were not prepared for the sudden change. Where the pigs had to be done away with in the towns many of the people were glad to turn to poultry.

All the Rural District Council cottages are supplied with a building which can be utilized for pigs, but it is not very satisfactory for this purpose. It would be much better if a regular piggery could be supplied with each cottage.

Mr. JAMES LYON, Lord Steward, Pakenham Hall, Castlepollard.

Mr. Lyon, representing Westmeath County Committee of Agriculture, stated that pigs are bred principally by the larger tillage farmers and fed by smaller holders. Some of the pigs are also fed by the breeders. Westmeath comprises a large area of grass land on which store cattle only are raised, and this would probably account for the limited number of breeding sows. Any milk left over after that required for calf rearing is made into butter or given to pigs. A large number of horses are bred; the mares are either ordinary working animals or brood mares run on the grass lands. More pigs should certainly be kept in the county, but this cannot very well be done without additional tillage. The tillage farms provide a greater quantity of feeding offal and milk. Without the latter breeding cannot be carried on, and it is not to be had on the grazing land. The people who till are mainly those on small holdings, and they keep up the pig population. The tillage area is principally on the Cavan side and around Killebeggan, but this is a comparatively small district.

Mr. James Lyon—continued.

The total number of sows in the county was 7192 and of boars 15, of which eight were premium animals, or one for each division of the county. The £500 at the disposal of the Committee for live stock was allocated as follows—Horses, £132; cattle, £414; swine, £440. The amount set aside for horses does not seem high, and ample provision appeared to have been made for swine; one premium only had not been taken up. It might be an inducement if 25 were offered. He would be inclined also to raise the fee to 3/6. The ordinary charge is 1/6. The non-premium animals are a good class either of the Large York or White Under. He personally used the York, and any sows in the district go to that class of boar. The idea is to cross the White Under.

He sold in Castlepollard or Mullingar. There is no dead meat market nearer than Cavan, which is twenty miles away, and pigs would not be sent that far.

He had charge of a herd of pure bred Large Yorks and supplied premium boars. The business was not very paying, but these returned something more than if sold for pork. At present prices for the better, however, the trade was very small. He paid a fair sum for the stock animals, which if he had ordinary sows and a boar he would be getting nearly the same price for the fattened animals.

He would breed 25 to 30 boars in the year, and nearly all were passed for premiums. He remembered having only one rejected, and he had no difficulty in marketing it; it was castrated and sold in the fair without any remark. He had no other outlet for boars except as pork.

The animals are marked at five months old and in almost every case taken off the premium shortly afterwards. He did not recollect having any left to six months.

While he thought the premium might be raised to 25, he would be willing to see the sum amount go to the purchaser with a view to encouraging the industry in preference to allowing an additional sum to the breeder. If the breeder gets 45 for five months old boars it would be adequate to enable him to keep up his stock. In the ordinary course such animals would not be worth more than 45 lbs. He made no difference in the feeding given to boars and fattening animals. His experience did not go to show that the castrated pig thrives better. Of course, if pork then in price the breeder will require to be paid a higher figure for boars. After a certain time separate accommodation had to be provided for the boars, but he calculated upon this.

He had lost one crate only; but he experienced some difficulty and delay in getting them returned. He was five miles from a railway station and one mile from where he sold fat pigs. Compared with the extra cost of sending boars to the station, when the cart went to the fair it would probably be standing there half the day compared to two hours to go to the railway with the boars, which would work out at about the same cost.

In addition to the £50 set aside for premiums and the encouragement given to pig keepers under the Cottage and Farm Prize Scheme, under which additional marks are awarded where cottagers keep pigs and for good housing, the County Committee had arranged for a new scheme to come into operation in the current year by which prizes to the value of £32 would be offered to induce breeders to keep their best sows. In each of the 8 rural districts two sets of prizes would be given (i) four of the value of 20/-, 15/-, 10/-, and 5/- to small holders and labourers, and (ii) two of 45, 40, and 25 to larger holders. The judging is carried out in connection with the ordinary Farm Prize Scheme. The Westmeath scheme differs from that of other counties in the provision of the higher set of prizes. This scheme is divided between the two Parliamentary divisions, and amounts to £12.

Piggeries are not provided with the Rural District Council's cottages, and this he considered to be a mistake. Where pigs are kept the occupiers of the cottages have had to put up small houses, but these are not very satisfactory. It would probably be difficult now to have proper provision made by the District Councils.

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Mr. James Lynam—continued.

He agreed as to the advisability of affording some assistance in the way of instruction and a small loan where the Agricultural Instructor recommended that suitable provision could be made for pigs. Such loans should be given without any red tape. The small farmer will not feed more than two or three pigs at a time, and £1 to £10 could enable him to erect adequate accommodation for that number. Under competent supervision the farmer should do most of the work himself.

Mr. JAMES MURRAY, Instructor in the Handling of Offal to the Department of Agriculture.

Mr. Murray referred to the three methods of dealing with pigs, viz., where they are (1) sent alive to the owner, (2) killed at a centre, and (3) killed at home. His duties consisted of giving instruction in the handling and treatment of the offal over the country generally, but owing to the system adopted in Ulster his operations as to pig offal are principally confined to that province. Where the pigs were killed at home he attended at the farms for the purpose of demonstrating how the offal should be taken out and utilised to the best advantage. There is undoubtedly considerable waste in the north at present, particularly where the pigs are slaughtered at the farmhouse. The offal is by no means worth so much to the farmer as to the owner, as the latter is in a position to deal with it and to find an outlet for each particular portion. According to figures which he had obtained from southern centres in 1914, they regarded the offal as worth on an average 2/3, made up as follows:—

	s.	d.
Narrow gut, ... ..	0	4½
Fat ends, ... ..	0	2
Stomach (raw), ... ..	0	1
Pluck (including heart, liver, lungs, throat), ... ..	0	10
St. ft. tallow, ... ..	0	7
Fat ends and bung, ... ..	0	14
Bladder, ... ..	0	0½

He had not placed any figure on the blood, which is used for puddings, not on the hair. His own experience would indicate that these prices are fair. The owner could, however, obtain a better return—perhaps 8/8 to 4/-—when the materials were converted into sausages, etc., and he understood this to be the practice in the south. Turnings, etc., would be put into the manure, and the manure would be worth about 6d. a string of 20 yards.

From the point of view of securing better handling and a better return for the offal he advocated in the north a greater extension of the practice of bringing the pigs in to a centre to be slaughtered. This is now done in big towns like Carru, Donagh, Carrickmacross, Ballymena, Coleraine, Derry, Omeagh, Strabane, and many other places, and he thought the majority of the pigs would probably now be dealt with at these centres in the north. As a rule no cold store is available at such centres, but the pigs are brought in and killed for the following day's market. The pig is usually killed free, the offal being retained by the butcher; in some towns the farmer is also given 6d. Only when this system is followed did he consider it practicable to obtain a proper return for the offal.

He did not think the animal received more abuse in bringing it some distance into the town for slaughter than if killed at the farm. In the latter case when the butcher goes out the whole place is upset, a great deal of labour is required, and this is a loss to the farmer compared with sending the pig in to a slaughterhouse. Even when the butcher has a number of places to go to and travels round rapidly, time is wasted in getting ready and waiting for him. The farmer has then to take into account the difference in the return for the offal. The factory is in a position to collect a quantity and to dispose of it, and he estimated that in the north it should be worth 1/10; its value was less in the north than in the southern centre.

Mr. James Murray—continued.

When five or six pigs are killed on the farm, and this number is common enough, the custom is for the owner to keep the liver and head of one pig and share portions from the others were given to neighbours; the neighbours in turn did the same. The remainder of the offal is usually thrown out. He agreed that the pluck should be worth at least 1½d. per lb. for home consumption, but this depended entirely on the farmer's taste. The liver is really the only edible portion.

Sometimes the killer takes the narrow gut; the farmers may render the 3½ lb. of fat, which is used as grease—considered to be worth 2d. a lb., but ordinary cut grease can be bought for 1d. It is then taken into the town, where it is sold at 1½d. to collectors, who in turn sell it to cleansers, who work it into candles. If the price is not considered satisfactory the farmer throws it out instead of troubling to clean it. The bladder is generally thrown away. He usually recommended that the blood be preserved for manure.

Where the pig went into a killing centre the farmer is at liberty to take home the pluck should he care to do so.

Apart from the lack of accommodation and facilities for dealing with pigs on the farmers' premises, the manner in which the pig is often treated previous to killing calls for attention. The usual way of taking a pig out of the sty is to tie a rope around its feet, but in several places such as Armagh, Cavan, and Fethard, an instrument known as a gobbling hook is used. The use of this inflicts considerable torture on the animal.

Diseased heads coming into the country are suspected there, and the examination is very close. Diseased glands would be taken out before the head is sent over. At one time the Glasgow authorities would not allow any heads to come into that city if the glands had been removed. Hundreds of barrels of heads imported into these countries receive no more than a superficial inspection.

Mr. THOMAS S. PORTER, Inspector, Department of Agriculture.

Stated that he was in charge of the action of the Department dealing with the marketing of produce, and in this connection supervised the work undertaken by Mr. Murray, the previous witness. He was not, however, acquainted with the technical details of Mr. Murray's work, but he wished to supplement the latter's evidence on a few points.

Some of the centres obtained more than 2/3 for the offal, but he considered that this figure represented a fair average. He had frequently examined the returns from pigs dealt with at killing centres, and 2/4½ was the highest figure he could recollect. The price would, of course, be higher where the pluck is suitably placed on British markets, but this business often entails risk and loss.

He would estimate the value of the offal to the farmer at 10d., if the pluck were eaten, but as a rule most plucks are wasted by farmers; to the central killing depot, 1s. 10d.; and to the owner 2/3; the last mentioned had every facility for handling offal. He did not include lard. By fat he meant the rough fat taken off the instantanees.

He had been surprised to learn the extent to which pigs are now dealt with at central killing stations in Ulster. At the same time he would say that the greater proportion of Ulster pigs are killed on the farmers' premises. The farmer invariably told him, when discussing the matter with those who had tried both methods, that he preferred to send in the pig to the depot. It would, of course, be admitted that at the farm the pig would be in the best condition for killing, but on the whole it is much better to have the pig killed at a local centre, where the work would be done more satisfactorily, as one skilled operator would handle the pigs, as against a number of unskilled men. The pig depreciates at the fair and in the treatment it receives when going to the curing factory. At the central killing place, where 50 to 100 pigs weekly are



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Mr. Thomas S. Porter—continued.

death with, he thought it would pay the butcher well to handle the pigs free of charge and give the farmer 8d. to 1/- in return for the offal. He had no evidence to show that a better price is paid for the pig killed at home as compared with that sent with at certain depots. In most parts of Ulster the two systems prevail.

When pigs are killed at home a general waste of time is involved. He had moreover noticed few farmhouses at which proper facilities for killing were available or accommodation for keeping the pork over for the market. It has frequently to be left in the open all night. He had been told that exposure to wet and snow did not improve the pork. The licensed pig butcher is not usually in a position to take away the offal, but sometimes brings a car with him for this purpose and can then afford to give the farmer something for it; when pigs are killed on the farm part of the pork is used by the farmer's household, but most of it is given away. The farmer saves the fat, but he was under the impression that the farmer could buy oint grease cheaper. From the farmer's point of view there is now a great wastage as regards offal.

Mr. Murray's duty is to give such instruction as will enable the farmers and butchers to utilise the offal to better advantage and prevent as far as possible the wastage that occurs not only at the farmers' houses, but the killing centres. He would admit that there is great difficulty in disposing of the offal from the farm, and his endeavour had been to induce the butcher to bring round a cart to collect it. At present when the farmer brought any of the offal into the town the police he got from collectors was rarely satisfactory. The blood and hair goes to waste except at the big factory. Wet hair was being sold at about 25 to 27 a ton.

The Department's attention had been drawn to the use of the gibbing hook. In his view this implement was quite unnecessary, whilst it inflicted much pain and injury. The hook is caught in the pig's jaw for the purpose of dragging the animal out of the sty; it is then stunned with a mallet, hammer or hatchet. He had been shown at a curing factory how a number of the heads had been damaged by this method of killing. A good operator will kill the pig in about 35 seconds, but he had counted 45 minutes from the time the butcher started until the animal was dead. In the better places a wooden maul is used for stunning, in lieu of an iron hammer or hatchet, and the Department were now lending out a number of mauls and inducing killers to use them.

Mr. J. J. GALLAGHER, Secretary, Meath County Committee of Agriculture.

Estimated that he had been nominated by the County Committee to give evidence as to the provision made in County Meath in connection with the Swine Breeding Scheme.

The greater part of the county is in permanent pasture and many of the farms are very large. Except on the borders of Cavan and Louth, tillage is not extensively practised and in that part of the county only could he say that pigs were kept. Pigs could not be maintained without tillage or milk and he was informed by farmers that they found it very difficult to make the industry profitable when all the food had to be bought. It is hardly likely that Meath would ever be made a pig raising county as on the good land even the small farmers do not till. To increase the number of pigs it would be necessary to have more of the land under tillage, and he agreed that if the feeding is grown the farmers would be independent of foreign foodstuffs. In tillage districts at present it is not likely that Indian meal would be bought for pig feeding. As a rule labourers in the grazing districts neither till their plots nor keep pigs.

The amount at the disposal of the County Committee for live stock was £800, and the allocations were, for horses £350, cattle £465, and swine £35, providing for seven premiums. Previous to this year five only were allowed for. In 1914 the total number of boars had been 57. It would, therefore, be seen

Mr. J. J. GALLAGHER—continued.

that as regards the pig breeding industry Meath, despite the fact, is the third lowest in the country. People do not go in for pigs, and boar owners find it difficult to secure the number of sows required to qualify for the premium. The few who have been in the habit of keeping boars may be all right, but others would find it difficult. Many of the ordinary sows might, however, be replaced by premium animals. The applications now number less than five, and one of the reasons he understood to be the small sum allowed as second year premiums, and most of the premium boars are held over for the two years. The first year premium covers the cost of the animal only, whilst the ordinary boar is either bred on the place or purchased very cheaply, probably for 80/- when ten weeks old.

It might be an inducement if the fee were raised. Sow owners are pettishly large farmers who can readily afford to pay a reasonable sum, and he did not think an extra 1/- would interfere with the scheme. The charge for ordinary boars is 2/6. He recognised that the scheme became somewhat heavy in the second year, and that it would be an advantage to have a change annually. He, therefore, suggested a premium of 4s and a fee of 2/-. Were there more applications he was quite satisfied that the Committee would set aside additional funds for swine.

Horses retain a large sum in the county and are kept by all classes of farmers. Many of the mares are maintained simply as brood mares, but he did not consider this profitable. Of course in the limited area under tillage they were working animals.

The property are sold at about 15 years old, as the small farmers cannot afford to keep them longer, and would average perhaps 420 in the local fairs; they mostly go out of the country. Meath, however, has made a reputation for better breeding, and it was, of course, desirable that that reputation should be maintained. One hundred and eight nominations are provided for annually of the value of £2 and £3 each. The total would number about 75, so that each costs the Committee about 24.

Pigs would be sold at about seven months old, and he agreed that if the number at one time in the county was 15,700 it would mean about 80,000 marketed each year, or approximately a return of £100,000 annually. It would not be fair, however, to compare a return for all the pigs marketed in the county with a return for foals the property of the mares subsidised by the Committee. There is no pork market in the county.

If premiums were taken up and more money were set aside it would, of course, have to be taken from horses or cattle, but he believed the Committee would be prepared to do this. An increase in the amount of the subsidy would probably cause additional premium animals to be taken, but reviewing the conditions prevailing in the county he doubted whether it would tend to increase the number of pigs kept. The only effect would be to replace some of the ordinary boars; this, however, would be most desirable.

Black boars are popular with some breeders, but premiums are now confined to the Large White Torks. From the point of view of the owner as now explained to him he quite agreed that it would not be desirable to subsidise an animal that would be unsuitable for the Irish bacon trade.

Mr. JOHN HOOPER, B.A., Representing the Statistics and Intelligence Branch of the Department of Agriculture and Technical Instruction.

Explained the manner in which statistics of the pig industry are collected by the Department, and stated that these statistics are collected with other agricultural statistics in June of each year by the Royal Irish Constabulary (or the Dublin Metropolitan Police in Dublin and the adjoining districts over which that force have jurisdiction). A Consular call on each pig keeper and settler, in addition to particulars about other stock, how many pigs he had on the 1st of June and how many of these were (1) boars kept

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Mr. John Hooper, B.A.—continued.

Mr. John Hooper, B.A.—continued.

for breeding, (2) sows kept for breeding, (3) other pigs six months old and upwards, and (4) pigs under six months. These numbers, together with other particulars, are entered down by the Constable opposite the name and address of the pig keeper in a book specially furnished for the purpose by the Department, and these records are sent to the Department, where the numbers for each Poor Law Union, County, etc., are compiled.

As regards the method adopted by the Department in estimating the number of pigs available for slaughter each year, he stated that the method relied upon was based on the number of pigs under six months enumerated by the police on the 1st of June. This figure, taken in conjunction with the mortality rates for pigs of different ages up to six months, gives the number of births in the six months from the 1st December to 1st June.

The Department assume that out of every 1,000 bornams born alive the number that die from disease, accident, etc., in the first month is 120 (103 of which die in the first half of the month), in the second and third months, 20 (12 in the second and 8 in the third month), in the next three months 13 (6 in the fourth, 5 in the fifth, and 2 in the sixth month), and 4 in the seventh month. It is assumed that the average age at which pigs are ready for slaughter is seven months and also that this is the age at which pigs are used for breeding purposes for the first time. These figures were obtained by averaging estimates furnished for each district in Ireland by 58 Agricultural Inspectors. The estimate of each Inspector was formed by averaging a number of estimates furnished to him by pig keepers in his district, and accordingly the estimates given above are considered to be accurate.

Taking these estimates as correct, and assuming that the same number of pigs is born each day from, say, 1st December to the following 1st June, it follows that out of every 1,000 pigs born in this six months 134 die from disease, etc., before the 1st June, or in other words 866 are alive on the 1st June. Accordingly the number of pigs born from 1st December to 1st June is obtained by multiplying by 1,000 the number of pigs under six months on the 1st June and dividing by 866. From the mortality rates men-

tioned it also follows that out of every 1,000 pigs born 120 die from disease or accident before reaching the age of seven months, the remaining 880 being at their age fit to be slaughtered or to replenish breeding stock. Accordingly if the number of births in the six months 1st December to 1st June calculated as stated is multiplied by 841 and divided by 1,000 a figure results which shows the number of pigs ready for slaughter at breeding in the six months from the following 1st July to 1st December—seven months being taken as the age at which the pigs are ready for slaughter or breeding. Accordingly this number is then calculated for the second half of each year. The corresponding number for the first half of the year is assumed to be the average of the numbers for the previous and subsequent six months. Thus the number of pigs that mature in the calendar year is calculated. The number of these required to make good the deaths from disease, etc., in the breeding stock is very small (not more than about 4,000 in the year), not so allowed for at the rate of 3 per cent. per annum mortality. The increase or decrease in the numbers of breeding stock is also taken into account in calculating the number of pigs slaughtered.

Taking the average number of bornams born per annum in the last eight years calculated as indicated above and dividing by the average number of breeding sows kept, the number of bornams born per annum for every 10 breeding sows enumerated is 172. The average of independent estimates of this figure which were furnished by the Agricultural Inspectors was 176, which goes to show the accuracy of the data used in the above calculations.

It would not be correct to say that the number of pigs that mature in twelve months is double the number of pigs under six months at a particular date, assuming that the pig population remains constant from month to month or day to day. Such an estimate would be somewhat too high; a certain number of deaths is overlooked in this method as the pigs under six months would be of all ages from one day old up to six months old and before maturing would have to go through a certain amount of risk from disease, etc., which would be considerable for the newly born bornams but small for the pigs approaching the age of six months.

Table showing the estimated total numbers of Pigs slaughtered in Ireland and exported from Ireland, the estimated equivalent weight of Pork, and the estimated total value in each of the years 1905-14 inclusive.

Year.	Estimated Number of Pigs slaughtered in Ireland.	Number of Pigs exported alive from Ireland.	Estimated Total number of Pigs slaughtered and exported.	Estimated Equivalent Weight of Pork.*	Average Price of Pork per cwt.	Estimated Total Value.†
				cwt.	s. d.	£
1914 ..	1,670,000	148,000	1,818,000	2,727,000	59 9	8,166,000
1913 ..	1,599,000	200,000	1,799,000	2,563,000	53 6	8,138,000
1912 ..	1,755,000	263,000	2,018,000	3,036,000	56 0	8,332,000
1911 ..	1,869,000	342,000	2,211,000	3,016,000	51 9	7,891,000
1910 ..	1,478,000	324,000	1,782,000	2,674,000	60 3	8,054,000
1909 ..	1,444,000	327,000	1,771,000	2,656,000	55 3	7,337,000
1908 ..	1,508,000	387,000	1,895,000	2,842,000	48 0	6,822,000†
1907 ..	1,514,000	482,000	1,996,000	2,994,000	50 0	7,454,000
1906 ..	1,408,000	428,000	1,837,000	2,755,000	51 0	7,027,000
1905 ..	1,491,000	364,000	1,855,000	2,783,000	49 6	6,887,000

\* The pigs are assumed to yield on an average 12 stone of Pork.

† This is the estimated total value received by pig keepers from Bacon Curers, Pork Merchants, and exporters of live pigs.

‡ In "The Agricultural Output of Ireland in 1908" the estimate of the total value was given as £5,863,000. Information received after the publication of that Report shows that this estimate was too low.

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DUBLIN, 20th January, 1915.

Mr. John Hooper, B.A.—continued

Table showing the total estimated value\* of Live Pigs and Pig Products (Bacon, Hams, Pock, Pigs' Heads, Sausages, Lard, etc.) exported from and imported into Ireland.

Year.	Exports.	Imports.	Year.	Exports.	Imports.
	£	£		£	£
1913 ..	8,917,000	2,480,000	1908 ..	5,912,000	2,655,000
1912 ..	6,337,000	2,130,000	1907 ..	5,235,000	2,621,000
1911 ..	5,400,000	2,258,000	1906 ..	4,732,000	2,546,000
1910 ..	5,083,000	2,168,000	1905 ..	4,335,000	2,020,000
1909 ..	5,644,000	2,630,000	1904 ..	4,628,000	1,834,000

\* The value at the Irish port of exportation or importation.

With regard to the method adopted in arriving at the value of the Irish import and export trade in pigs and pig products, he stated that the values were estimated. The average price per head or per cut, of imports and of exports were estimated and these prices were then applied to the total number of pigs imported or exported as returned by the Department's ship inspectors and to the total weight of pig products imported or exported as returned by Harbour Authorities and Shipping Companies.

Asked if he could supply figures showing a comparison of the pig stocks kept in Denmark and Ireland, he furnished the three tables which follow—

TABLE 1.

Year.	Total Number of Pigs in	
	Denmark.	Ireland.
1914 ..	2,496,661	1,305,638
1909 ..	1,467,822	1,149,179
1903 ..	1,436,609	1,383,516
1898 ..	1,186,493	1,283,912
1893 ..	828,131	1,152,417

TABLE 2.

Numbers of Pigs in 1914 in Denmark and Ireland according to the classification adopted in each country.

DENMARK.			IRELAND.		
<i>Breeding Stock—</i>			<i>Breeding Stock—</i>		
Boms over four months ..	..	12,637	Boms .. ..	..	1,408
Sows over four months ..	..	280,629	Sows .. ..	..	193,189
<i>Other Pigs—</i>			<i>Other Pigs—</i>		
Over four months ..	..	707,673	Over six months ..	..	173,816
Under four months ..	..	1,496,422	Under six months ..	..	996,696
Total ..	..	2,496,661	Total ..	..	1,305,638

TABLE 3.

The Percentages and Densities of the pig population on different sized holdings.

Holdings.	Percentages of Total Number of Pigs.		Number of Pigs on 100 acres of land.	
	In Ireland in 1912.	In Denmark in 1909.	In Ireland in 1912.	In Denmark in 1909.
Under 1 acre .. ..	2.4	1.6	00	161
1 to 5 acres .. ..	3.0	2.8	21	63
5 to 15 acres .. ..	16.9	11.1	13	36
15 to 30 acres .. ..	24.1	12.2	10	26
30 to 50 acres .. ..	20.0	17.7	8	19
50 to 100 acres .. ..	20.9	27.0	6	18
100 to 200 acres .. ..	9.3	28.1	4	21
200 to 500 acres .. ..	2.8	1.5	2	2
Over 500 acres .. ..	0.6	2.0	1	4
Waste Land, etc. .. ..	1.7	—	—	—
All Classes of Holdings ..	100.0	100.0	6*	15*

\* The number of pigs per 100 acres in 1914 was 6 in Ireland and 16 in Denmark.

DUBLIN, 26th January, 1915.

*Mr. John Hooper, B.A.—continued.*

He drew attention to the fact that the percentage of pigs kept in Denmark increases with the size of the holdings until the holding reaches 200 acres. The number of pigs in Denmark on holdings from 100 to 200 acres was 35.1 per cent. of the total number in the country; the number of pigs in Ireland on holdings of this size was only 9.3 per cent. of the total number of pigs in Ireland. The figures for Denmark were taken from "The Statistical Year Book of Denmark for 1914." The classification of holdings adopted in this report is different from that used by the Department, and the percentages shown for different holdings in Denmark are estimates made from the classified figures published for Denmark.

From figures showing the total number of pigs and the total produce of the potato crop in Ireland in each of the last forty years he observed that a good potato-year is generally followed, but not always, by a large pig population in the succeeding year. With regard to the variations in the number of pigs in Ireland, he pointed out that though there are violent annual fluctuations

which tend to obscure the general tendency to increase or diminish, still the pig population seemed to vary generally in cycles of four years, as there is usually found in each cycle of four years two upward and two downward tendencies helping to neutralise each other. In this connection he submitted figures showing averages of the numbers in Ireland for periods of four years.

The average of the numbers on the 1st of June for each four years since 1896 were:—

Average 1896 to 1899	...	1,357,314
" 1900 to 1903	...	1,260,206
" 1904 to 1907	...	1,360,176
" 1908 to 1911	...	1,245,596
" 1912, 1913, and 1914	...	1,225,085

Above figures show there has been a slight but continuous downward tendency since 1896-1899.

# APPENDICES.

## APPENDIX I.

### MEMORANDUM ON THE CONDITIONS OF THE PIG-BREEDING INDUSTRY IN DENMARK.

Prepared by Mr. O. W. H. BOTTARUS, Member of Committee.

As frequent reference has been made during the course of the Inquiry to Denmark, and the conditions which govern the production of pork there, a short account of the country and the system which has been employed to foster and develop the pig-breeding industry may be of interest for purposes of comparison and information.

The Kingdom of Denmark, which comprises the peninsula of Jutland and the islands of Fyen, Zealand, and Lolland, as well as numerous other smaller islands, has an area of 15,382 square miles and in 1941 contained a population of 1,797,956. It is accordingly barely half the size of Ireland, and with little more than half the population. The soil is thin and gravelly and there are large areas of poor inferior land. The general surface of the country is flat with gentle undulations, and the highest elevation reaches only 260 feet above sea level. On this account the surface is much exposed during the long winter season to cold winds. The summer season is short and cool, and for this reason early ripening cereals are essential. The crops grown include oats, wheat, barley, rye, roots, and hay. Careful preservation of the manure made by the number of live stock kept is a distinctive feature of Danish farming. This, it is found, gives "body" and moisture-holding capacity to the light type of dry soils which are common, and is sufficient in itself to maintain fertility. Artificial fertilisers are only applied to a very moderate extent and are confined to one or two crops. The usual seven course rotation practised is, (1) Rye sown in autumn and used as green feeding for cattle the following season; (2) Roots (after being ploughed in during autumn), generally Beets, also Mangolds, Turnips, Potatoes, Carrots, etc. (Beet is more largely grown than Turnips owing to the fact that it does not taint the milk when fed to dairy cows, and also because having a deeper-rooting habit of growth it suits light land better); (3) Barley or Oats laid down with a "seeds" mixture of grasses and clovers. For the next two years (4 and 5) the grass both in spring and autumn receives a dressing of liquid manure from the urine tank to be found in connection with each farmstead. A considerable part of the grass is mown for hay in the two seasons; the rest is grazed and the cows are tethered in lines (very few fences exist) which are moved forward daily until the crop is eaten. (6) Oats followed by (7) a Foreign crop such as a mixture of oats and peas, which are partly fed green and partly made into hay; fields which have become exceptionally foul with weeds are occasionally left fallow in this year for the purpose of thorough cleaning. There is a considerable export of barley, but the quantity of oats, wheat, and rye grown is not sufficient to provide food for the live stock, and in consequence feeding stuffs are imported each year to a large value.

In 1912 the value of the feeding stuffs imported amounted to £4,235,000, whereas in the same year the value of the similar commodity exported was only £192,000. The value of the grain imports in 1912 was £5,558,000, while the total export value was £778,000. The Danish export of corn is practically confined to barley, including of late years wheat. The total yield of the various grain crops for the year 1912 were:—Oats, 41,565,000 bushels; Barley, 22,154,000 bushels, or approximately 550,000 tons; Rye, 17,905,500; other sorts, 17,215,000; Wheat, 3,402,500 bushels, or approximately 86,035 tons. Of this total yield, the relative quantities of the only two grain crops exported were:—Barley, 77,800 tons, and Wheat 18,200 tons.

In 1913 the total value of imports amounted to £47,322,000, and the exports to £45,072,000; of this export, the proportion sent to the United Kingdom totalled £28,880,628.

The following table shows the comparative values in 1913 of the Butter, Eggs, Bacon, and Pork exported from Denmark and Ireland to the British market:—

	DENMARK.	IRELAND.
	£	£
Butter, ...	10,037,580	8,785,645
Eggs, ...	2,290,840	3,019,167
Bacon, ...	8,065,370	4,260,354
Pork, ...	245,798	1,034,197 (Live Pigs)
		194,454 (Fresh Pork)

Of the total quantity of bacon and hams (7,837,993 cwt.) imported into Great Britain in 1913, nearly 35 per cent. of this came from the United States, 31 per cent. from Denmark, 16 per cent. from Ireland, 9 per cent. from the Netherlands, 4 per cent. from Canada, and 4 per cent. from Russia.

The position which Denmark holds as a producer of butter, eggs, and bacon is generally admitted to be due to two main causes, viz., the satisfactory character of the educational system, and the conditions of land tenure enforced by the State. The following extract from an authoritative\* publication (1912) indicates briefly the outline which these two agencies for national improvement in agriculture follow:—

"Education is compulsory and free for children from 7 to 14 years of age, the public schools being maintained by Communal rates. Of the whole population, 87.8 per cent. live by agriculture, 13.5 per cent. by manufactures, and 15 per cent. by commerce and transport. . . . About five-sixths of the land is possessed by small freeholders and peasants, the law forbidding the union of small farms into large estates. There are 21 agricultural or horticultural schools in the country, and a Veterinary and Agricultural College at Copenhagen, to which the State makes an annual grant of £21,110."

As may be deduced from the annual exports shown in a previous table, Danish farmers have almost exclusively devoted themselves to Dairying and Pork production. The former rendered the development of the latter essential. The Report of a Canadian Commission which visited Denmark in 1909 to inquire into the Pig-Breeding Industry makes this point clear:—

"While pig-rearing is a prominent and valuable branch of Danish agriculture, it stands second to dairying, which is the chief branch of farming. Butter for the British market is the first object of the farmer, and this leaves a tremendous quantity of by-product in the form of skim-milk. Without this most of these visited considered pig-rearing could not profitably be carried on. Everywhere skim-milk or whey constitutes a portion of the swine ration, the number of swine fed largely depending upon the size of the milking herd. About two or three pigs per cow is the rule on many of the farms visited."

\* See *Hand's Annual* for 1913, p. 208.

† The following Table shows the number of the different descriptions of Live Stock in Ireland and in Denmark in 1914:—

	Cattle.	Sheep.	Pigs.	Horses.
Ireland ..	5,061,645	3,666,361	1,305,435	610,345
Denmark ..	2,462,562	514,318	2,466,661	568,290

The following paragraphs extracted from the Consular Report for 1912 regarding the trade and commerce of Denmark deals with the value of agriculture as an industry in Denmark, and the large part which the small holder has taken in its development:—

"That agriculture is Denmark's most important industry can best be seen by recent statistics, which indicate that 88 per cent. of the country's export is 'agricultural produce.' Denmark annually exports butter, bacon, eggs, and meat to the value of 450,000,000 kr. (425,000,000). It is principally during the last 20 to 25 years that an enormous development has taken place. A cause of this growth is the fact that the laws all tend to prevent the creation of new large farms, as it is forbidden to join smaller farms and thus make large farms out of them, and also that a large proportion of the land leased to, or worked by the peasants, which 50 to 60 years ago belonged to large estates, has been sold to them, so that the Danish peasant himself owns the land he cultivates; it is estimated that only one-fifth of the agricultural population are tenants or lease-holders, the remaining peasant farmers being freeholders.

"It may also be remarked that the successful results obtained by Danish agriculture of recent years are in a great measure to be attributed to the system prevailing at the Danish Government and State-aided schools, at which special attention is given to educating the pupils of both sexes for practical farming life.

"Denmark's population was in February, 1911, 2,707,975, of which number 34.8 per cent. belonged to the agricultural classes. Of large estates or gentleman's farms there are 2,008, of peasants' farms 75,520, and of small holdings 74,000.

"Small holdings.—Of these, there are about 14,000, each comprising an area of about 3 to 7 acres. On a well conducted small holding there are usually a couple of cows, which produce annually about 5,000 kilos, of milk (330 gallons), representing a value of £12. Besides these some 10 or 12 pigs are kept for fattening, representing a value of £12 to £37. Some 50 or 60 fowls, capable of giving a yearly return of £8 10s., are also usually kept by the small holder, as well as two or three calves, which may give a profit of £3 4s. per head. A small holding of the size mentioned may be reckoned to have a value of from £170 to £300, including the live-stock. No branch of Danish agriculture has reaped more profit from the co-operative movement than these small holdings, as they now receive the same payment for their milk and pigs as the large farmer, consequently they have risen higher in value than other land. Not only the State, but agricultural organisation as a whole does much to help this class of farmer.

"In the last few years several estates, as well as many farms, have been sold to be divided up into small holdings. Several of these are worked as complete model farms, which by reason of their intense cultivation, return their holders a good income. Many small holders increase their profits by gardening and bee-keeping."

"The dairying industry of Denmark may be taken as dating from 1875, when low prices made the production of grain unprofitable, and Danish farmers were forced to change their system. The line chosen was to increase the amount of foodstuffs raised on farms, and to feed this to dairy cows. The establishment of co-operative creameries followed and an organized system of butter production to meet the requirements of the British market established. Up to 1887 Danish pigs and pork were exported chiefly to Germany, but in that year the import restrictions imposed by the latter country effectively stopped this trade, and another market had to be secured. After an investigation of the requirements of the British pork and bacon market, steps were taken to make this the outlet for supplies. In 1888 the pig population of Denmark was 771,000 and in that year the number of pigs handled in the single curing factory then built was 35,407. In 1914 pig stocks in Denmark had increased to 2,495,051, the number of co-operative bacon factories had reached a total of 42,\* in which 1,949,529 pigs were slaughtered for export as bacon during that year. While most of this trade has been built up by the intelligent co-

operation of the Danish farmers, the assistance of Government in various ways has not been wanting.

The chief point to which attention was early directed was the breeding of a type of pig which suited the requirements of the British market. For this purpose the Dane had as foundation stock a breed of native pigs known as the Landrace, and in order to improve the quality of these, the plan of crossing with the Large York was found to give best results. These are now the only two recognised breeds in the country. With the assistance of the Government, which has a special live stock Commissioner and seven assistants to direct the industry, a number of breeding centres in which one or other of the two types of pigs are raised have been established in each district. These are under the supervision of a Committee of three members, two of whom are appointed by the local co-operative pig-feeding society or societies, the third member being the local assistant to the Government Live Stock Commissioner. The object of the Government Live Stock Department in assisting breeding centres is to enable young pigs of high quality for breeding purposes to be sold to farmers at a reasonable price—the general price for young pigs about 8 weeks old being approximately 27/- to 29/- each. These are now (1915) 25 of these centres subsidised at which young boars of the pure Large York breed are produced for sale to farmers, and 107 at which mostly young sows of the native Danish breed are raised for distribution.

In addition to these breeding centres there are a number of control experiment stations where the offspring of approved animals are registered, and tests made as to their fattening and other qualities. A Government grant of approximately £1,400 is made for these two purposes, and a similar sum is subscribed by the co-operative societies.

Each year a Report is issued on the results obtained. According to the most recent of these published, the experiments show that there is no difference in the two breeds as regards thriving, i.e., the rate of gain made. The native breed has, however, been found to be inferior at the slaughter-house test, especially as regards hams and sides; the Large York gives about 2 per cent. more bacon fit for export, and thus carries a lesser proportion of offal than the native breed. In both breeds about 1-1/2 % of increase was obtained from 34 food units. The age of the pigs when slaughtered was on the average barely 200 days, or approximately close on 7 months, and the weight was 198 lbs., i.e., 1 cwt. 8 lbs. 2 lbs.

In addition to the foregoing there are a large number of prize breeding societies established for the purpose of producing a useful type of pig to fulfil the requirements of both the farmer and the bacon factory. These are under the control of the co-operative societies, and though formerly in receipt of a Government grant are not so now. In all, it would appear, the amount of the direct subsidies given by Government—apart from the Government Commissioners appointed to supervise the industry—is approximately £3,000 per annum.

For a number of years past considerable attention has been paid in Denmark to the results obtained from different methods of feeding. The main objects of the experiments carried out have been (1) to ascertain the fattening powers of various combinations of feeding stuffs, their effect upon the meat, also the proportion of sum or its equivalent required to produce one pound of pork; (2) to determine the relative economic value of the three recognised breeds (a) native Danish, (b) Large York, and (c) a cross of the two first breeds. Since 1908 these experiments have been carried out in connection with the Royal Agricultural and Veterinary College at Copenhagen under the supervision of the distinguished Veterinarian, Professor Bang, and annual reports dealing with the results obtained are published. The aim throughout both in breeding and feeding has been how to raise most economically a type of pig which will arrive quickly at a standard weight of 195 to 200 lbs. dead and produce prime quality bacon. To the Danish experiments is due primarily the credit of having definitely ascertained the "food-unit" value of each class of food given to pigs, using one pound of grain, such as barley, oats, wheat, etc., as a basis. In this way the feeding value of one pound of grain has been found to possess the same feeding value as 4 pounds of boiled potatoes, 5 pounds of sugar beets, green lettuce or green vetches, 5 pounds of skim milk

\* The number is now 45.

† The number of young farrowed by Danish sows between 15th July, 1913, and 15th July, 1914, was 1,064,000, or 1,413 young per 100 sows (14.13 per sow). The number of heads of pigs increased between 1909 and 1914 from 188,000 to 268,000, an average increase of 4,000 heads per annum. — *Journal of the Board of Agriculture for England, May, 1915, p. 126.*

(a gilts weighing 105 lbs.), and 8 pounds of mangelia. On this basis a variation in the character of the diet according to the classes of pigs and the feeding material available at the season can be prepared. One single fact, which, it may be mentioned, has been demonstrated over and over again to the Danish farmer through these experiments is, that the cost of gain increases with the age and weight of the pigs; that is to say, the older and heavier the pigs get, the greater the amount of food units necessary to put on the same amount of gain.

The Report of the Canadian Commission dealing with this aspect of the industry states:—

"The system of feeding according to the weight of the pigs is believed to give the maximum of profit from the food consumed. This has the confidence of the feeders throughout the length and breadth of the land. By lectures and the distribution of literature all farmers know these things, and, being educated and thrifty, they do not follow old systems and customs because they are old, but adopt the new because they believe them to be more profitable. The experiment station is believed in, and feeders everywhere are anxious to learn and adopt the methods recommended by these institutions. It must be remembered that those in charge of the station work are not only extremely practical but sufficiently conservative to be sure of the accuracy of their findings before giving them out. Instead of spinning fine theories and endeavouring to work these out, they begin at the other end and consult the pig first and follow the way opened. The result of this is that pig feeding throughout Denmark is extremely uniform."

As regards the imported foodstuffs used, these are largely bought from various countries in quantity through co-operative feed-buying associations, and include brass, rye, maize, cotton seed cake and sunflower seed cake. By this means the Danish farmer gets his feeding at a comparatively low price.

The price which will be paid by factories for pigs during the week which follows is generally fixed each Saturday. A Committee consisting of the President of the Co-operative Curing Association, the Manager of the Factory, and a prominent farmer who is not on the discounter, are entrusted with this duty. The manager can supply the others with the latest telegrams and information regarding the state of the British bacon market and the results of the consignments shipped during the week; guided by these facts, after providing for a profit of approximately  $5/24$  to  $7/24$  per pig and a small allowance for the working expenses, the Committee fix upon the quotation for the coming week. This is promptly telegraphed or telephoned through to the supply area, so that feeders know exactly what they are doing before consigning their pigs. Great care is taken in fixing a figure which will return the association a profit, and much competition exists among associations as to which shall pay the highest final dividends.

In regard to the tendency observable in Ireland of heavy market supplies of pork being confined to cer-

tain months, the Canadian Commission were informed that in Denmark "no steps are taken by the associations to discourage heavy deliveries during any particular season of the year, as for instance in the autumn when other countries have heavy runs. The farmers have learned the wisdom of even distribution throughout the year. Apart from this the farmers are guided in the number of pigs fed on the production of milk. Since this is fairly constant throughout the year, it follows that the pig stock is, as a rule, about the same from month to month, and from season to season."

In order to ensure that the weekly supplies of bacon sent to England are marketed to best advantage, a federation of the co-operative bacon factories exists with a central office in Copenhagen. It consists of representatives from all the Committees of the co-operative slaughteries and all the managers. This office is furnished from week to week with complete returns of the business transacted at each co-operative factory, including cost of production and the actual market returns of bacon sold. A circular embodying this information is sent out to all factories enabling them to see how each is succeeding in comparison with others. This system has proved of considerable help in fostering methods of improvement and in stimulating the industry as a whole.

In conclusion, a paragraph from the Report of the Canadian Commission, which is in reality a summary of the conditions that have operated in making the pig industry such a large source of profit to Danish farmers, may be quoted:—

"Danish farmers have for many years depended on the pig for the necessary revenue. While Continental markets were open for live pigs, and paid good prices for pork products, there was no incentive to produce a special type of pig. The closing of Germany against live pigs from Denmark compelled Danish farmers to seek a new market. This they found in Great Britain. An investigation revealed that highest prices were paid for what was known as Yorkshire sides. It was discovered also that milk feeding was favourable to the production of a high quality of bacon. Constantly growing revenue from the pig has been a strong incentive to the man on the farm. In planning his rotation the Danish farmer remembers the pig and grows what will best suit that branch of his operations. He has skim milk and has studied its value in pork production. He has learned the correct quantity to feed for best results for pigs of different ages. He combines his foods and prepares them to reap the last cent of profit. Through the co-operative curing organisation he pays an expert to look after the conversion of his pigs into bacon and of bacon into money. He pays for having these things done, he does not worry about them but devotes his energies to cheap production of the class of pigs that brings him the most money. The bacon industry of Denmark might be compared to a well conducted departmental store having a competent manager in charge of each department. The success of each branch is the success of the store, which in the case in question is the Danish swine rearing industry."

\* Report of Canadian Commission on Swine Husbandry in the United Kingdom and Denmark (pp. 49 and 50).

## APPENDIX II.

### TRANSLATION OF MEMORANDUM PREPARED BY MR. PETER AUG. MØRKEBERG, GOVERNMENT KONSULENT IN LIVE STOCK BREEDING, DEALING WITH THE NATURE AND SCOPE OF THE STATE ASSISTANCE GIVEN TO THE PIG BREEDING INDUSTRY IN DENMARK.

(Obtained through the courtesy of the Foreign Office—April, 1913.)

The State provision for the improvement of breeds of swine in Denmark is carried out with the help of—

- A.—Live Stock Shows (organised by the Agricultural Societies and their Provincial Federations).
- B.—Swine-breeding Centres and Control and Experiment Stations.
- C.—Stud Books.

In addition there is the assistance of the Government Konsulent or Experts in swine-breeding.

The State funds applied to the encouragement of swine-breeding through the Live Stock Shows vary somewhat from year to year, as the amount of the sum is dependent upon the amount applied to that purpose by the Agricultural Societies.

In 1912, which is the latest year for which these figures have been published, the sum applied to awards

for pigs at the public Live Stock Shows was 24,169 kr. (£1,456). Of this sum one-half was defrayed by the State. In the same year a sum of 10,938 kr. (£612) was allotted to awards for pigs at the Provincial Federation Shows. Of this the State contributed 7,605 kr. (£469), or two-thirds of the total amount.

Thus in 1913 a sum of 19,069 kr. (£1,113) was applied, out of State funds, to awards for swine at Live Stock Shows.

The State funds applied to the establishment of Swine-breeding Centres and Control and Experiment Stations for Swine amount annually to 26,000 kr. (£1,482).

The annual amount contributed annually out of State funds towards the keeping of the swine stud book is 2,500 kr.

Thus in the financial year 1915/14 there was allotted out of Government funds—

A.—To Live Stock Shows, about	18,000 kr. (£1,110)
B.—To the establishment of Swine-breeding Centres and Control and Experiment Stations for Swine, about	25,000 kr. (£1,458)
C.—To keeping the Swine Stud-Book, about	2,500 kr. (£145)
Total, about	45,500 kr. (£2,693)

This sum may be taken as approximately that at present applied by the State under ordinary circumstances to the objects mentioned.

The amount expended by the State on the Konsulent Service (Government Experts) for the benefit of pig-breeding in particular cannot be precisely stated. This work is done by a Konsulent, under whom there are 7 Assistants, but these 8 officials have other duties to perform as well. It may be estimated that the State annually expends about 4,000 kr. (£240) on the work done by the Konsulent Service in connection with the furtherance of swine-breeding.

Thus the State may be said to expend annually a sum of about £2,300 kr., or somewhat over £2,000 in promoting the industry of swine-breeding.

The Government Grant to the Live Stock Shows is paid out through the medium of the Agricultural Societies to which is entrusted the actual distribution of the money among the various exhibitors. The Show Regulations drawn up by the various Agricultural Societies for the distribution of the money must, however, be in accordance with the provisions of the Live Stock Law.

The Government Grant for establishing Swine-breeding Centres and Control and Experiment Stations for swine is paid by the State to the Co-operative Danish Associations, which contribute an equal amount. The distribution of funds to the owners of Breeding Centres and Experiment Stations is in accordance with the rules, approved by the Ministry of Agriculture, for the recognition by the State of Swine-breeding Centres and the rules with regard to Control and Experiment Stations for swine.

The Government Grant towards the stud-books is paid out to the Danish Co-operative Agricultural Societies, which administer the money.

The Government Grant to the Konsulent Service, i.e., provision of experts, is paid by the Treasury either directly or through the Royal Danish Agricultural Society, to the experts employed.

### APPENDIX III.

#### LETTER FROM MR. HARALD FABER, COMMISSIONER FOR DANISH PRODUCE ON THE BRITISH MARKETS.

Reprinted from "The Times" of 29th January, 1915.

#### DANISH BACON PRODUCTION.

TO THE EDITOR OF THE TIMES.

Sir,—In *The Times* of November 10 you published a letter from me in which I showed that the large animal industry of Denmark cannot exist on the productions from Danish soil alone, but that a large import of vegetable food for man and beast is required equaling (in 1913) more than a quarter (28 per cent.) of the harvest, calculated as corn values. My purpose was to show how unfounded was the suspicion that Denmark imported corn, particularly maize, in order to forward it to Germany—all the more unfounded as the export from Denmark of all corn, including, of course, maize, and all cattle foods, was prohibited soon after the beginning of the war, for very obvious reasons, as the following figures will show.

The official statistics from the Danish Statistical Department for the year 1914 are now to hand and they show very forcibly what difficulties the animal industry of that country has had to contend with. In order to fully understand this, it should be borne in mind that the number of the various domestic animals in Denmark has increased largely during recent years; the number of pigs, which in 1906 was 1½ millions, had last summer reached the "record" of 2½ millions, almost one for each inhabitant, a figure which explains the large imports of Danish bacon to this country. But these pigs must be fed. When the number of pigs increases by 70 per cent. the need for imported foodstuff must necessarily increase largely. The number of cattle was also the highest on record and shows an increase during five years of more than 9 per cent.

Before the war Denmark had imported less corn and cattle food than during the corresponding period of

the previous year, partly owing to the good harvest in 1913. During the months JANUARY-JULY the imports were, expressed in 1,000 tons:—

	Total.	Maize.	Oats,	Oats and Barley.
1913	991	250	342	47
1914	839	191	329	88

When the war broke out the stock of corn and cattle food was therefore not very large. The five months of the war AUGUST to DECEMBER show very large reductions in the supply of imported corn and cattle food, all the more serious as the result of the harvest of 1914 fell below that of 1913\*; the imports were, in 1,000 tons:—

	Total.	Maize.	Oats,	Oats and Barley.
1913	394	145	254	57
1914	307	78	128	19

a total shortage during five months of 400,000 tons.

\* Calculated as corn values the harvest of 1914 was 4,700,000 tons, while that of 1913 was 5,000,000 tons.



The total import of maize fell from 405,000 tons in 1913 to 286,000 tons in 1914, and the supply had to be drawn from other than the usual sources—viz., in tons:—

Imported from	1913.	1914.
Germany ... ..	75,000	33,000
United States ... ..	121,000	7,000
Argentina ... ..	100,000	22,000
United Kingdom ... ..	2,000	33,000*
Russia ... ..	15,000	30,000
Balkan States ... ..	55,000	104,000
Other Countries ... ..	24,000	23,000
Total ... ..	469,000	298,000

Owing to the increasing number of pigs the Danish supply of bacon to the English market has steadily grown from 1,735 tons a week in 1910 to 2,205 tons a week in 1913. During the last quarter of the year 1914 the weekly supply has been very large, 2,765 tons, and this large supply has kept prices down, even below

\* Maize was shipped from U.K., but much of what was exported from U.K. in December, 1914, was not included in the imports to Denmark until January this year.

what they were during the same quarter of 1913. But these large supplies are partly due to the fact that the number of pigs in Denmark has been gradually reduced. Sows, even pregnant ones, and pigs not yet fully grown have been killed because the feeding stuffs have been so expensive and because of the fear of not getting supplies enough later on. Suckling pigs, which before the war fetched 90s., became almost unsaleable and were sold at 2s. to 3s. in December, showing that Danish farmers were disinclined to fatten pigs for bacon. The imports of bacon from Denmark are likely to be smaller later on, and as Denmark supplies half the bacon imported to U.K., this will likely affect bacon prices here. The "record" import of bacon from Denmark last year, 135,740 tons, valued at nearly £10,000,000 sterling, is, therefore, not likely to be repeated next year unless the supply of foodstuffs to Denmark is very considerably improved. The shortage last year compared with 1913 was 480,000 tons.

The Danish Government was therefore wise in prohibiting the export of corn and cattle feed soon after the beginning of the war, in the interest of the Danish population in general and the Danish farmers especially.

I am, Sir, your obedient servant,

HAROLD FABER.

7 and 8, Idol Lane, E.C., Jan. 27.

## APPENDIX IV.

### MEMORANDUM ON THE PIG-BREEDING INDUSTRY IN IRELAND.

Furnished by Mr. B. H. Keane, Cappoquin Bacon Factory, Co. Waterford.

I.—The Improved Economic Conditions of the Irish Farmer.—Since the introduction of the various Land Acts and the following up of them by land purchase, the Irish farmer has become much more prosperous, and tillage has been on the decline. Unfortunately this prosperity is not due to increased energy on the part of the farmer, but to the fact that he can make increased profits out of grazing land without employing labour, and with no personal exertion. Ireland is becoming more and more every year a cattle nursery for the English feeder. The enormous increase in bank deposits, and the extreme value of Irish land go to show that the Irish farmer, even with a shrinking tillage acreage, is still becoming steadily more prosperous.

The raising of pigs entails some exertion, and there is no doubt that this branch of farming cannot be successful if the raiser has to go to the shop for everything his pigs eat. Generally speaking the poorest districts in Ireland produce relatively most fat pigs and the steadiest supplies, but with increased prosperity there is a tendency towards idleness, and the somewhat troublesome pig raising industry suffers. In many instances the farmer only breeds and feeds pigs when conditions appear exceptionally favourable. He gets in a stock of pigs, rears and fattens them, and has them ready just about the time a period of lower prices is beginning. If he would sometimes try reversing this procedure and begin pig raising when prices are low, he would find that he would more frequently meet good markets; or preferably, if he maintained a steady supply he would find the good markets would more than recompense for the bad.

II.—The Labour Question.—With the decline of tillage, the cost of living, and the standard of comfort have increased. The demand for labour has become less. The labourer has had to emigrate to the large industrial towns in England and America. Labourers were great pig fatteners, but now that they have to a large extent left the country, the fattening as well as the raising of pigs is more than ever dependent on the farmer, but the labour being difficult to obtain, the farmer finds pig fattening a greater burden than it was when labour was plentiful and cheap.

III.—The Stricter Enforcement of Sanitary Laws.—There is no doubt that the Sanitary Laws required looking into, and probably drastic changes were necessary, but the prohibition of keeping of pigs in yards in the villages and towns throughout the country gave the pig fattening industry a very serious check. The farmer has, therefore, to be looked to almost entirely for the supply of fat pigs which were previously supplied largely by labourers, villagers, and townspeople. If the system of allotment gardens as practised in many parts of England were adopted in this country, townspeople could feed pigs on their allotments.

IV.—Price of Maize and Potato Supplies.—Since the decline in acreage of corn and potatoes, pig feeders depend almost entirely on maize meal and separated milk. The price of maize fluctuates from time to time, and whenever a period comes of high priced maize and low prices for fat pigs, pig production stops. The following table shows the prices of Maize Meal F.O.R. in Dungarvan, which is generally a cheap town, and the prices (dead weight) for pigs at Cappoquin from May, 1911, to August, 1912:—

1911.	Price of Maize.	Price of Pigs.	1912.	Price of Maize.	Price of Pigs.
May ... ..	16s. to 17s.	51s.	January ... ..	20s. to 21s.	45s. to 47s.
June ... ..	17s.	52s. to 55s.	February ... ..	21s.	48s. to 51s.
July ... ..	17s.	48s. to 52s.	March ... ..	20s. to 21s.	52s.
August ... ..	17s.	48s. to 51s.	April ... ..	22s. to 23s. 6d.	53s. to 58s.
September ... ..	17s. to 18s.	48s. to 51s.	May ... ..	20s. 6d.	56s. to 58s.
October ... ..	18s. to 20s.	48s. to 49s.	June ... ..	22s. to 23s. 6d.	57s. to 60s.
November ... ..	20s.	48s. to 49s.	July ... ..	17s. to 19s. 6d.	53s. to 61s.
December ... ..	20s.	41s. to 42s.	August ... ..	18s. 6d. to 17s.	58s. to 59s.

Pigs were plentiful in 1911, but during that year the price of maize advanced and remained high until well into 1912. The potato crop in 1912 was bad. This resulted in farmers fattening off their breed-stock. In 1913 pigs were very scarce and brought unprecedented prices, maize got cheaper, and the potato crop was excellent, so that farmers began to resume pig breeding and an improved supply in 1914 resulted.

V.—*Market Fluctuations.*—England is the chief market for Irish bacon, and every year it becomes more and more a dumping ground for the bacon-products of other countries, thanks to the exceptionally favourable facilities offered by the carrying companies to foreign countries. Now more than ever in Ireland in competition with the surplus supplies of every bacon producing country in the world, and paying freight out of all proportion higher than foreign competitors. In this connection the following table, showing the freight for bacon from various Continental ports to London and Manchester and the freight between Capotaquin and these two cities, may be of interest:—

	s. d.
Esbjerg (Denmark) via Harwich to London,	22 8
Göteborg (Sweden) " " " "	18 8
Rotterdam (Holland) " " " "	11 6
Capotaquin " " " "	54 3
Copenhagen (Denmark) to Manchester,	32 3
Malmö (Sweden) " " " "	32 3
Rotterdam " " " "	24 10
Capotaquin " " " "	37 6

A good maize harvest stimulates pig raising in foreign countries as well as in Ireland, resulting in cheap pigs and cheap bacon. The prosperous though short-sighted Irish farmer promptly stops unprofitable pig production, whereas the thrifty, far-sighted Dane maintains his supplies, even at a loss. When bacon recovers Ireland has no pigs, and the foreign competitor steps in with steady supplies, never fails his customers, and reaps a rich harvest.

VI.—*Quality of Bacon.*—It is generally admitted that the quality of Irish bacon is far superior to that produced by foreign countries, but cost of living having increased, the British customer has become less fastidious than he used to be, and price is now becoming

more important than quality. Many retailers who formerly bought Irish bacon only are now buying Danish almost entirely, except when they think their stocks will not meet immediate clearance; it is then the better keeping, better quality, Irish bacon gets the preference. These remarks, of course, do not apply in the case of retailers who cater for the wealthy consumer.

VII.—*Quality of the Irish Pig.*—It is a regrettable fact that the retailer prefers Danish to Irish sides. Irish pigs are, generally speaking, heavy-shouldered. The shoulder or fore-end is the cheapest portion of a side of bacon, so naturally the retailer prefers sides with a light fore-end. The shoulder of the Danish pig is lighter than that of the Irish. There is no doubt that this point could soon be remedied, but it entails some little trouble in the selection of premium boars, and it is a matter which requires most urgent attention.

The following recommendations are suggested as a means of improving the pig-raising industry in Ireland:—

(1) The farmer should be impressed with the fact that a steady supply of pigs would be far more profitable to him than an intermittent supply. He should get to depend on his farm for the food with which he can rear and fatten his pigs. Barley growing should be advocated.

(2) If farmers could be induced to till more heavily, more labourers would be kept in the country, and local public bodies would have to satisfy themselves that their cottages were occupied by bona-fide labourers instead of independent gentlemen who have for years past given up labouring.

(3) If the sanitary laws require the same drastic clearance as in the past, the system of allotment gardens might be worthy of consideration.

(4) The potato crop is very important to pig raising and farmers should be advised to extend their potato areas.

(5) The quality of premium boars requires stricter supervision, and the selection requires more careful consideration.

(6) More favourable railway rates are required for bacon. Curers, with cheaper rates, could give better prices for pigs.

## APPENDIX V.

### NOTES ON THE PIG-BREEDING INDUSTRY IN CO. MONAGHAN.

Furnished by Sir Nicholas Gonsells, *Asghenwallen, Belfry.*

I have been for years convinced of the importance of the pig industry and have studied it in all its branches as opportunities served, so that whatever I may say is not mere guess work or second hand information, but the result of continued observation and some practical tests. I speak only from the small holders point of view and interests.

The pigs in Co. Monaghan are good, and getting better every year, but I think the number of acres should be doubled and might be trebled. Also I think we should not devote all our attention to bacon pigs. There is a good and constant market for light pork, and I suggest the introduction of a lighter breed for this trade such as the small Berkshire or small White-York. They are quick growers, small eaters, and make the nicest pork carcasses for the London market. They eat grass largely and can be kept in the open for six months of the year. I believe many of our people could keep a pig like this who had not the inclination or means to keep a baconer.

The housing and sanitary conditions in which some pigs are kept leaves much to be desired. Some day we will find out to our cost that it is wrong breeding from animals whose ancestors for generations have led unhealthy unnatural lives—hundreds of them never

walked a dozen miles in their lives. It is impossible that this mode of life can go on for ever without undermining and rotting the constitution of the animal. My belief is that a pig should be treated more like a milk cow than as it is now, viz., kept in the open in summer when it will graze and eat any roughage that can be spared. Sixty years ago cattle put in the stalls got boiled turnips. Who would do that now? Some will be said of pigs in 10 years I truly believe.

Twelve years ago I began to experiment in feeding pigs on raw (uncooked) food and have continued to do so since. I kept no accurate account though until this last autumn when I bought on 15th August 2 suckers at 41s. each, aged about 10 weeks. I at once began giving raw cabbage chopped, a little weeds, scalded and separated milk; the weeds was given in lessening quantities daily until on the 10th day they were receiving only milk and cabbage, this was continued until the mangels began to be thinned, and since then nothing was given but mangels and what cabbage was not required for household use, together with the separated milk. Nine weeks before slaughter one pound of rice was given daily to each, and in five weeks one pound of crushed oats was added daily for each; all was given dry, without any scalding or cooking.

The quantity of milk averaged 5 quarts per pig per day at a 1d. a quart given 25 weeks=250 gallons=17s. 6d.

The green food cannot be valued until the mangels are pulled, as they only get thinning and cabbage that would have gone to waste. Since pulling on 15th November the average weight of mangels fed to them was 16 pounds each per day at 8d. per cwt.; this would come to 5s. 4d. per pig.

Per Pig.  
s. d.

Rice meal at 9d. per stone for 9 weeks = 3 44

Bruised oats at 1/1 per stone for 4 weeks = 2 3

Separated milk at 1d. per gal. for 25 weeks = 8 0

Ureos at 1/2 for 10 days = 0 7

Summarised the feeding cost:-

	s.	d.
Ureos, ... ..	0	1 2
Rice meal, ... ..	0	6 0
Bruised oats, ... ..	0	4 4
Mangels, ... ..	0	10 8
Separated milk, ... ..	0	17 5
Total cost for two pigs, ... ..	2	0 5

In a strict farm account the price charged to the pigs for bruised oats, milk, and mangels would be charged to the farm, and hence the actual cost of the pigs for feeding would be 7/11 for the two.

## APPENDIX VI.

SUMMARY TABLE SHOWING THE QUANTITIES OF BACON, HAM, AND PORK IMPORTED INTO THE UNITED KINGDOM, 1904-1914.

ALSO EXPORTS FROM IRELAND OF FAT AND STORE PIGS (LIVE).

	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.	1914.
	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.
United States ...	3,985,946	4,019,186	3,855,835	3,577,682	3,559,877	1,987,740	2,706,237	2,525,081	2,875,957	2,903,274
Denmark ...	1,099,690	1,567,475	1,978,992	2,971,324	1,023,397	1,810,343	2,137,599	2,340,181	2,341,901	2,714,887
Canada ...	1,460,502	1,456,144	562,451	1,334,888	490,979	440,558	678,182	481,620	335,804	469,271
Beland ...	354,163	356,534	445,682	418,480	483,289	515,489	439,739	278,977	645,740	—
Other Countries* ...	150,545	136,162	164,153	82,944	109,294	304,824	280,043	232,034	209,947	—
Exports from Ireland	461,787	463,816	1,025,475	1,110,381	1,009,080	1,084,206	1,162,266	1,394,585	1,179,541	—
Exports from Ireland of Fat and Store Pigs (Live)†	Numbers. 365,823	Numbers. 426,430	Numbers. 481,967	Numbers. 347,479	Numbers. 357,159	Numbers. 354,071	Numbers. 345,349	Numbers. 256,241	Numbers. 290,296	Numbers. —

\* The principal countries included are Russia, Sweden, and Belgium.

† Fat and Store Pigs might be taken at about 1½ cwt. dead weight.

In 1913 the total supply of Bacon and Hams imported into the United Kingdom from Foreign Countries totalled 6,208,169 cwt. In the same year the exports of Bacon and Hams from Ireland reached 1,179,541 cwt., therefore Ireland's proportion of supply was about 16 per cent. of the total.

## APPENDIX VII.

SUMMARY TABLE SHOWING THE QUANTITIES AND VALUES OF BACON, HAM, AND PORK, AND NUMBERS AND VALUES OF FAT AND STORE SWINE EXPORTED FROM IRELAND IN THE YEARS 1904-1913; ALSO THE PIG POPULATION AND AVERAGE PRICE OF PORK EACH YEAR.

	Quantity of Bacon, Ham, and Pork Exported.	Pig Population.	Value of Bacon, Ham, and Pork Exported.	Number of Fat and Store Swine Exported.	Value of Fat and Store Swine Exported.	Total Value of Bacon, Ham, and Pork, and Fat and Store Swine Exported.	Average Price of Pork Per Cwt.
	Cwts.	Numbers.	£		£	£	s. d.
1904 ...	946,769	1,316,125	2,541,696	595,247	1,742,050	4,283,745	41 10½
1905 ...	869,707	1,254,318	2,645,373	563,555	1,771,991	3,915,464	48 5½
1906 ...	336,036	1,244,793	2,604,894	429,436	1,474,705	4,289,599	50 11½
1907 ...	1,075,476	1,327,068	3,184,098	461,977	1,536,683	4,741,779	50 1
1908 ...	1,116,351	1,317,849	3,187,849	337,476	1,232,558	4,696,337	48 6
1909 ...	1,099,690	1,146,179	3,274,579	337,159	1,451,000	4,694,466	55 5
1910 ...	1,024,206	1,206,066	3,841,901	324,071	1,389,512	5,174,213	59 3
1911 ...	1,162,266	1,110,381	3,519,116	342,340	1,301,828	4,880,946	51 0
1912 ...	1,394,585	1,323,967	4,497,502	345,349	1,305,083	5,799,585	55 1
1913 ...	1,179,541	1,090,200	4,603,558	290,296	1,024,197	4,457,353	58 7

## APPENDIX VIII.

SUMMARY TABLE SHOWING THE VALUES OF EXPORTS OF LIVE AND DEAD PORK FROM IRELAND TO UNITED KINGDOM, AND VALUES OF IMPORTS OF DEAD PORK INTO IRELAND IN THE YEARS 1906 TO 1912.

	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
	£	£	£	£	£	£	£	£
Exports of Live and Dead Pork.	3,018,464	4,382,999	4,741,370	4,000,537	5,614,635	5,174,513	4,899,946	5,769,555
Imports of Dead Pork.	1,855,361	2,568,567	2,329,890	2,365,225	2,227,749	1,838,071	2,045,516	1,868,461
Difference in favour of Exports.	2,055,103	2,814,432	2,411,480	1,635,312	3,386,886	3,336,442	2,854,430	3,901,094

## APPENDIX IX.

RETURN SHOWING PRICES PAID PER CWT. (DEAD WEIGHT) IN KILREA, BALLYMONEY, AND COLERAINE MARKETS FOR CERTAIN MONTHS.

Furnished by Mr. S. S. Young, Bellemead, Coleraine.

KILREA.		BALLYMONEY.		COLERAINE.	
Wednesday :		Thursday :		Saturday :	
Sept. 3rd, 1914	55s. to 55s.	Sept. 3rd, 1914	55s. to 55s. 6d.	Sept. 6th, 1914	55s. to 55s.
" 9th, 1914	55s. to 55s.	" 10th, 1914	55s. to 55s.	" 12th, 1914	55s. to 55s.
" 16th, 1914	55s. to 55s.	" 17th, 1914	55s. to 55s. 6d.	" 19th, 1914	55s. to 55s.
" 23rd, 1914	55s. to 55s.	" 24th, 1914	55s. to 55s.	" 26th, 1914	55s. to 55s.
" 30th, 1914	55s. to 55s.	Oct. 1st, 1914	55s. to 55s.	Oct. 3rd, 1914	55s. to 55s. 6d.
Oct. 7th, 1914	55s. to 55s.	" 8th, 1914	55s. to 55s.	" 10th, 1914	55s. to 55s.
" 14th, 1914	55s. to 55s.	" 15th, 1914	55s. to 55s.	" 17th, 1914	55s. to 55s.
" 21st, 1914	55s. to 55s.	" 22nd, 1914	55s. to 55s.	" 24th, 1914	55s. to 55s.
" 28th, 1914	55s. to 55s.	" 29th, 1914	55s. to 55s.	" 31st, 1914	55s. to 55s.
Nov. 4th, 1914	55s. to 55s.	Nov. 5th, 1914	55s. to 55s.	Nov. 7th, 1914	55s. to 55s. 6d.
" 11th, 1914	55s. to 55s.	" 12th, 1914	55s. to 55s.	" 14th, 1914	55s. to 55s.
" 18th, 1914	55s. to 55s.	" 19th, 1914	55s. to 55s.	" 21st, 1914	55s. to 55s.
" 25th, 1914	55s. to 55s.	" 26th, 1914	55s. to 55s.	" 28th, 1914	55s. to 55s.
Dec. 2nd, 1914	55s. to 55s.	Dec. 3rd, 1914	55s. to 55s.	Dec. 5th, 1914	55s. to 55s.
" 9th, 1914	55s. to 55s.	" 10th, 1914	55s. to 55s.	" 12th, 1914	55s. to 55s.
" 16th, 1914	55s. to 55s.	" 17th, 1914	55s. to 55s.	" 19th, 1914	55s. to 55s.
" 23rd, 1914	55s. to 55s.	" 24th, 1914	55s. to 55s.	Thursday :	
" 30th, 1914	55s. to 55s.	" 31st, 1914	55s. to 55s.	" 2nd, 1915	55s. to 55s.
Jan. 6th, 1915	55s. to 55s.	Jan. 7th, 1915	55s. to 55s.	Jan. 9th, 1915	55s. to 55s.

## APPENDIX X.

RETURN SHOWING THE NUMBERS OF PIGS SOLD, AND THE PRICES PAID FOR PORK (DEAD WEIGHT) IN IRVINESTOWN MARKETS IN 1914.

Date.	Number of Pigs.	Price Per Cwt.	Date.	Number of Pigs.	Price Per Cwt.
7 January, 1914	168	2 8 0	6 August, 1914	144	2 8 0
14 Do. ...	95	3 4 0	12 Do. ...	155	3 3 0
21 Do. ...	190	3 7 0	19 Do. ...	49	2 16 0
28 Do. ...	86	3 7 0	26 Do. ...	185	2 18 0
5 February	187	3 7 0	3 September	177	2 18 0
11 Do. ...	67	3 6 8	9 Do. ...	125	3 3 0
18 Do. ...	124	3 6 0	16 Do. ...	144	3 3 0
25 Do. ...	197	3 2 0	23 Do. ...	107	3 2 0
4 March	75	3 2 0	30 Do. ...	123	3 2 0
11 Do. ...	195	3 3 0	7 October	131	2 19 0
18 Do. ...	192	3 3 0	14 Do. ...	79	3 0 0
25 Do. ...	191	3 2 0	21 Do. ...	170	3 0 0
1 April	83	3 2 0	28 Do. ...	183	2 19 0
8 Do. ...	64	3 1 0	4 November	161	2 18 0
15 Do. ...	71	3 2 0	11 Do. ...	139	3 0 0
22 Do. ...	46	3 0 0	18 Do. ...	160	3 0 0
29 Do. ...	79	2 19 0	25 Do. ...	130	2 19 0
6 May	91	2 17 0	2 December	125	2 18 0
13 Do. ...	65	2 17 0	9 Do. ...	196	2 17 0
20 Do. ...	33	2 15 0	16 Do. ...	167	2 16 0
27 Do. ...	72	2 15 0	23 Do. ...	61	3 0 0
3 June	76	2 19 0	30 Do. ...	190	3 0 0
10 Do. ...	63	3 0 0			
17 Do. ...	85	2 19 0			
24 Do. ...	66	2 17 0			
1 July	129	2 16 0			
8 Do. ...	118	2 14 0			
15 Do. ...	75	2 12 0			
22 Do. ...	107	2 12 0			
29 Do. ...	131	2 14 0			

The above is a true Return from my books for the Year 1914.

W. DUNNAN,  
Weigh Master,

Irvinestown, Irvinestown Market.  
Feb. 2, 1915.

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